

## UNIVERSITY OF CALIFORNIA AT LOS ANGELES



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## A DIGEST <br> OF THE <br> NEW YORK SCHOOL INQUIRY

Submitted to the
New York Board of Education
July 17, 1913, by the
bUREAU OF MUNICIPAL RESEARCH
261 Broadway, New York City

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## FOREWORD

The New York school inquiry has come and gone. But inquiring into New York's school facts has just begun. While the school inquiry antedated the reorganization of the board of education itself and the resulting change of attitude toward teacher and public, it would be unfair to school commissioners who brought about this change of attitude to deny them large credit for independent and vigorous action in heading our schools "back to the child."

We therefore give joint credit to the school board itself and to the school inquiry for the Twenty Rediscoveries here noted, which characterize the new outlook with which New York City begins its school year 1913-1914.

Whatever errors in the school inquiry reports may later be shown by committees of New York's board of education, supervisors and teachers, or by students of education, the findings themselves will be helpful for years to come. Because the reports will not otherwise be generally available in condensed form we have, from a special fund provided by Mrs. E. H. Harriman, prepared this brief digest, after submitting to each investigator our proposed digest of his material, for correction if needed. We hope it will be found useful not only by school officers in New York and elsewhere, but by citizens wishing to help schools via first knowing about school needs and school work.

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## NOTE

Messrs. Bachman, Burks, Goddard, Armstrong, McMurry, Schneider and Davis wrote their approval of the digests of their reports with some suggested corrections which are here embodied
On September 26, after prolonged absence from the university, Mr. Elliott telegraphed:

Physically impossible on account extraordinary pressure university work for me to devote time and detailed attention requisite for your digest until after Oct. 10. Regret this unfortunate emergency

Mr. Ballou wrote:
I hereby acknowledge the receipt of your letter of August 24, 1913, addressed to me in Cincinnati, and containing your memoranda on my Report to the Committee on School Inquiry. Inasmuch as I have already devoted much more time to the New York Inquiry than I had expected to give it, I do not feel that I should give it further attention. In view of the fact that I cannot examine carefully your memoranda, I do not wish to be considered as in any way responsible for what you may or may not say about my report

Several days after Mr. Courtis had written his thanks for "the chance to see in advance the Bureau's digest of my report," he wrote:

After thinking the matter over, I have decided that in view of the peculiar conditions attending the Inquiry, and the fact that so far only an "Interim" report has been published, I am not at liberty to cooperate in the preparation of your digest, as you suggest in your letter of the 26th. I am, therefore, returning the same without comments
Similarly, a few days after Mr. Thompson had signified his intention of going over the digest on his return from his vacation and had recorded his appreciation of "your courtesy in allowing me to see in adrance what you propose to publish concerning my report," he wrote:

I find that Professor Hanus has made a digest of the New York Report which he considers comprehensive and adequate. I do not find that Professor Hanus or his other associates intend to assist in any independent digest such as the one you propose. I, therefore, respectfully decline to make any comment upon your digest of my report

The complete illustrated report of the board of estimate on both educational and business aspects of the school inquiry will be published in three volumes, 1500 pages (a limited number only) by the Committee on School Inquiry, 51 Chambers Street, New York City

## TWENTY REDISCOVERIES FOR NEW YORK'S PUBLIC SCHOOLS BY THE SCHOOL INQUIRY AND THE SCHOOL BOARD

1-That children cannot be schooled if they do not come to school
2-That the purpose of attendance officers is to keep children attending school

3-That children of sound mind should not be called feeble-minded or put among the feeble-minded and that defectives should be segregated and taught according to their incapacity

4-That children of different aptitudes and different nationalities should be taught different subjects in different ways

5-That the transition should be more natural from kindergarten to grades, and from elementary to high school
6-That boys and girls should continue to learn after beginning to earn

7-That preparation for commerce and trades should be more practical and more general

8-That when children are taught the three Rs they must be taught to use the three Rs with automatic correctness

9 -That buildings should be placed where children live, not near other schools where overcrowding is
10-That school buildings should be fireproof and sanitary, and class room air clean, always moving and not over-heated
11-That coal should be bought for its heat, not for its weight, and buildings, equipment and supplies handled efficiently
12-That teachers should be helped not policed by their supervisors
13 -That teachers who out-number supervisors thirty to one should "become regular purveyors of good to the entire school system," as President Churchill has urged
14 -That $\$ 3,500$ and $\$ 10,000$ supervisors should give their time to supervision that helps children, instead of to clerical work

15-That school records should be live "purveyors of truth" and not dead, misleading, harassing statistics
16-That the public should be given budget estimates based on facts not on guesses or unsupportable premises
17-That school commissioners should give time to big problemstesting their experts' efficiency and discovering children's needs -not to petty details
18-That the board of estimate can help school work by asking questions in the interest of taxpayers
19-That the public should be given school news in small doses of facts it can understand

20-That defending is worse than making-and infinitely worse than correcting-mistakes

## PURPOSE OF THE NEW YORK SCHOOL INQUIRY

Resolution of the Board of Estimate and Apportionment, Introduced by William A. Prendergast, Comptroller, October 26, 1910

Whereas, the budget of the department of education represents approximately one-third of the total appropriations of the city of New York for current administration purposes, and

Whereas, the appropriation recommended by the Budget Committee of the board of estimate and apportionment for the year 1910 for the purposes of the department of education represents an allowance of $\$ 1,600,000$ in excess of the product of the three mill tax appropriation required by law, and

Whereas, in formulating the allowance for the purpose of the department of education this board has been unable to secure sufficient and satisfactory information in explanation of requests for appropriations made by such department to enable it to reach proper conclusions with respect to the necessity and propriety of such requests, and

Whereas, it is the sense of this board that efficient and progressive administration of the schools of the city of New York is indispensable to the welfare and progress of the city, and that generous appropriations for the purposes of the department of education are desirable in so far as assurance and evidence can be given that such appropriations will be expended for purposes and in a manner to promote the efficiency and welfare of the schools, and to increase the value and effectiveness of the instruction given therein, and

Whereas, the growth and development of educational activities and improvement in educational methods annually presents to this board, in connection with the preparation of the tax and the corporate stock budgets, many questions bearing upon the efficacy of educational policies and methods now pursued, and upon the efficiency and economy of the administration of the affairs of the department of education,

Be it resolved, that the chairman of this board appoint a committee of three of its members to conduct an inquiry into the organization, equipment and methods, both financial and educational, of the department of education, including such plans and proposals as may have been formulated or may be under consideration by the board of education for extending and developing its educational activities, and that for this purpose the committec be authorized to associate with it such experts within and without the government of the city of New York as may assist it in the conduct of this inquiry and in the formulation of recommendations to this board, and that it be further authorized to employ such assistants as it may find necessary for the purposes of this inquiry, and

Be it further resolved, that for the purposes hereinabove mentioned, the board do include an appropriation of $\$ 50,000$ in the budget for the year 1911

## REPORT TITLES AND INVESTIGATORS' NAMES

## General

Conclusions of report as a whole, Paul H. Hanus, head of the department of education, Harvard University
General supervision and board of examiners, Edward C. Elliott, director of the school of education, University of Wisconsin
Handling and nature of correspondence by city and associate superintendents, W. A. Averill, New York Bureau of Municipal Research
Organization and methods of the board of education, Frank J. Goodnow and Frederick C. Howe; 385 pages for findings, 42 recommendations and supporting data; Economic utilization of the public school plant for recreational and educational purposes, Frederick C. Howe; 50 pages; reports to be published in sections in October, not yet released, Sept. 15, 1913; detailed analysis of conditions peculiar to New York, while extremely significant, are not of as general application as are available reports here digested

Note: E. C. Moore, professor of education, Yale University, was engaged and paid for a report on this subject which was rejected "for want of supporting facts"

## Elementary Schools

Quality of classroom instruction ; course of study; and supervision by principals, Frank M. McMurry, professor of elementary education, Teachers' College, Columbia University
Promotion, non-promotion and part time ; overage and method of determining overage; intermediate schools; estimating teachers needed, Frank P. Bachman, associate superintendent of schools, Cleveland
Arithmetic tests, S. A. Courtis, head of department of science and mathematics, Home and Day School, Detroit
Compulsory attendance service, Jesse D. Burks, director, Bureau of Municipal Research, Philadelphia
Ungraded classes, H. H. Goddard, New Jersey Training School for Feeble Minded Children, Vineland

## High Schools

Problems in organization and administration, Frank W. Ballou, assistant professor of education, University of Cincinnati
Course of study, Calvin O. Davis, assistant professor of education, University of Michigan
Commercial education, Frank V. Thompson, associate superintendent of schools, Boston
Vocational (industrial) schools, Herman Schneider, dean of the College of Engineering, University of Cincinnati

## Buildings

Conditions and efficiency; delay in construction, Charles G. Armstrong, consulting engineer, New York City
Atmospheric conditions in schools, Charles Baskerville and C. E. A. Winslow of the College of the City of New York

## WHAT THE INQUIRY COST

Total, business and educational branches, exclusive of cost of printing final report ..... \$95,067.00
Salaries Per Day
Armstrong ..... \$25.00
Averill (loaned by B. M. R.)
Bachman ..... 18.40
Ballou ..... 15.00
Burks ..... 15.00
Davis ..... 15.00
Courtis (expenses only) Elliott (and expenses) ..... 16.50
Goddard ..... 16.50
Goodnow ..... 25.00
Hantus ..... 30.00
Howe ..... 25.00
McMurry ..... 27.50
Moore ..... 20.00
Schneider ..... 30.00
Scudder ..... 5.00
Stuart ..... 15.00
Thompson ..... 16.50
West ..... 30.00
Business and administrative branch-March ..... 30,
1911-May 30, 1913
Salaries ..... \$37,438.13
Personal expenses ..... 195.75
Apparatus, office and other expenses ..... 2,046.43
Total \$39,608.31
Educational branch-(1) July 1, 1911—Feb. 1, 1913,under direction of Prof. Hanus
Salaries ..... \$40,879.78
Personal expenses ..... 1,190.40
Office and other expenses ..... 6,507.88
Total (not including printing, proofread- ing, author's corrections $\$ 2,200$ ) \$48,578.06
(2) July 1, 1912-May 30, 1913, supplementary investigation
Salaries ..... \$4,684.80Personal expenses96.65
Office and other expenses ..... 2,099.19
Total ..... \$6,880.63
Number of days work on educational aspects was 4,118 days;on business and administrative branches was 2,448 days

# INTRODUCTION AND CONCLUSIONS OF THE "REPORT AS A WHOLE" 

Written, December, 1912 by Prof. Hanus without "opportunity for thoroughgoing conferences" with associates; 59 pages

Summarizes statistics of school plant, teaching force and enrollment for the year ending July 31, 1911

Describes principles on which plan for inquiry adopted on July 10, 1912, was based

Explains why defects rather than merits are reported: "The purpose of the inquiry was constructive throughont. We have not failed to appreciate the merits of the school system and they are many, but since our chief purpose was constructive criticism, we have devoted ourselves more particularly to such defects as we have been able to point out, and to suggestions and recommendations for removing or minimizing them"
"The method of the inquiry has been statistical, inspectorial (personal inspection by members of the staff), comparative (comparisons of New York City's schools and school system with those of other cities), and experimental so far as reliable experimental or scientific methods are available in education and could be employed; and we have made much use of conferences with officials and members of the teaching and supervisory staff"

Formulates (1) "aims and principles underlying the contemporary provision for and tendencies in American education"; and (2) a system of schools as a "standard of educational opportunity" for New York City

Enumerates 18 chief defects as conclusions of the report as a whole

Notes that work on the budget for 1912 (1) "lay wholly outside our own plan, (2) consumed more than two months of time, (3) because of our limited staff and the great mass of data required, but not available, ought never to have been undertaken and was necessarily unsatisfactory to us; and (4) will not be further considered in this account of our work"

Summarizes findings, conclusions and recommendations of each specialist

## WHAT THE SCHOOL INQUIRY PRAISED

## As to City Superintendent

He has achieved distinguished success in protecting the school system and the teaching staff from the selfish influences that are always found in the public service of a great city-and this is conspicuous service . . No other educational leader of this generation has had a task of such magnitude and complexity. It is very improbable that any other man could have succeeded as he has in unifying the school system and harmonizing the educational forces of the city . . . He has made the New York public school system one of nation wide significance (Elliott)
He was justified in 1911 in his endeavor to increase the rate of promotion (Bachman)

## As to Board of Examiners (Elliott)

It has proved to be a most effective instrumentality for the accomplishment of the principal ends for which it was created ; that is, to place the appointment of teachers upon a merit basis, and thereby isolate the schools from the self interest of individuals, classes and parties
Any agency that has protected the teaching force as has the board of examiners from the influence of forces and motives wholly unrelated to efficiency is entitled to commendation
Refused 4,400 licenses in 1911
Has exercised its functions in a singularly effective and progressive manner
Including the city superintendent in the board is to be commended
Its handling of 41,000 candidates during three years has required a degree of skill, ingenuity and foresight not required of any other controlling body in the school system
Questions used in recent examinations are fair tests of professional preparation
Oral examination system has been made an important and valuable factor in the selection of candidates for eligible lists

## As to Elementary Principals

Number provided is entirely adequate for effective supervision (Elliott)
There are principals here and there who have admirable plans for teachers' mectings (McMurry)
The salary schedules are such as to attract from other cities men and women of competence to supervise schools (Elliott)

## As to Special Branches

Number of directors and assistant directors (except in the kindergarten) is sufficient to meet the demand for effective direction and supervision (Elliott)

## As to Classroom Instruction

Teachers as a rule are conscientious and energetic (McMurry)

As to Kindergarten (McMurry)
Instruction meets test of the four inquiry standards in a satisfactory manner
Curriculum is in substantial harmony with the inquiry standards; does not limit teachers' freedom; unusual interest displayed in individual child ; subject matter abundantly favors exercise of initiative and expression of individuality; provision for motivation and for consideration of relative values for children

## As to Reading and Literature

Selection of subject matter is good as far as it goes and many of the suggestions on method are valuable; breadth in provision for subordination of form to thought ; excellent suggestions favoring oral reading by teachers (McMurry)

## As to Grammar and Composition

Emphasis on much oral composition and on organization of ideas is worthy of commendation (McMurry)

## As to Spelling

Reasonable in amount; content and suggested method free from excessive formality; attention to organization shown: desirable distinction between "teaching" words and testing ability to spell them (McMurry)

## As to Shop Work, Drawing, Cooking

Technical sequence is well developed; cooking is concerned with more intimate relationship of home-making (McMurry)

## As to Nature Study

Many teachers providing materials and conducting creditable lessons deserve the highest commendation (McMurry)

As to Non-promotion and Overage
Lower rate for overage pupils proves wisdom of special "E" classes (Bachman)
Low rate for pupils unable to use English language demonstrates wisdom of special "C" classes (Bachman)

As to Basing Estimate of Teachers Needed upon Register
Present policy of keeping a record of each child until officially discharged by principal is, in our opinion, right (Bachman)
As to Ungraded Classes (Goddard)
Teachers are, as a rule, faithful, conscientious, interested in their problem
Most hopeful sign is that nearly all of them are painfully aware of their own lack of training
In a few schools very satisfactory work is being done in spite of all the handicaps
On the whole the rooms are good
Great work is being done and a work which cannot and must not be stopped because of its value to the children who are in the regular grades

As to High School Organization and Administration (Ballou)
Standard of 25 hours work a week for each teacher seems to us satisfactory
Having teachers in clarge of most of these administrative functions, such as sororities, fraternities, school publications, athletics, is approved because teachers are gaining valuable insight into the administration of the school and thereby increasing their teaching efficiency

## As to High School Course of Study (Davis)

Compared with ten other cities New York gives equal or greater attention to foreign languages, drawing, oral expression and physical training
Branches offered in New York City and not provided in many of the other cities are: Italian, English history as a separate subject, and advanced or supplementary courses in Greck and Latin
In aggregate amount of foreign language offered, New York exceeds every other city
The general plan of dividing the high school system into general and special curricula is commended
In other academic branches scope of work offered is more nearly in keeping with the liberal spirit of the age; in mathematics and foreign languages the scope is ample and calls for no expansion
Newly issued syllabi on courses in history are planned to correct several defects found in the old syllabi

As to Commercial Education (Thompson)
Geographical distribution of schools with respect to residential needs is deserving of commendation
Inspection of work of commercial teachers [number not given] showed a general good level of achievement

Requirements for commercial teachers are well suited to secure efficient and trained teachers, except for teachers of commercial English, commercial modern languages, economics and business organization
Two commercial high schools show praiseworthy effort to make all school subjects reflect the vocational purpose of the schools
No shortage of commercial equipment is reported
Practice work connected with clerical subjects is noticeably intelligent and effective
Employment bureaus and follow-up systems are reported in pratically all schools
Several schools report cooperation with typewriter companies in placing graduates
Course has been proposed to offer advanced work, unrestricted to clerical arts, to one class of commercial workers
As to Trade Training (Schneider)
Manhattan Trade School offers an opportunity to 300 girls to be skilled work-women "in a shorter time than through trade training alone"
As a prevocational school for girls this school can be most highly recommended
The chief virtue of the school (Boys' Trade) lies in the attraction it offers a restless and school-sick boy to continue in a less academic but vigorous school course
As to Night Schools (Schneider)
Doing three commendable kinds of work; teaching English to foreigners, teaching industrial science to those in energizing occupations; and giving instruction in dressmaking, millinery and household science
Classes composed of adults in energizing trades are thorough and to the point, and students are alert

## As to Parental School (Schneider)

It is without question the best prevocational school the writer has seen
Every boy who stays long enough is brought into contact with most of the trades necessary to the maintenance of a community

## As to Attendance Work

Annually since 1908 defects of organization and procedure have been the object of severe criticism in the reports of the associate superintendent in charge (Burks)

## As to Part Time

The Ettinger plan promoted from one to seven more children per hundred than full time classes; and is to be preferred to other part time plans (Bachman)

As to Intermediate Schools (Bachman)
Superiority of intermediate and $1 \mathrm{~A}-6 \mathrm{~B}$ schools over schools with eight grades is shown because: 43 of $1 \%$ fewer pupils leave 6B classes; $1 \%$ fewer pupils leave 7 th and Sth year: $2 \%$ more pupils promoted; 13 times more terms of work covered
Economy of threc intermediate schools demonstrated as compared to 13 all-grade schools with about the same number of children, because they require $5.33 \%$ fewer regular class rooms; $27.32 \%$ fewer manual training shops; $17.10 \%$ fewer cooking rooms; $18.17 \%$ fewer gymnasiums; $\$ 400,000$ less in original investment for shops and cooking rooms for $20,0007 \mathrm{~A}-8 \mathrm{~B}$ pupils; $5.31 \%$ fewer regular class teachers; $8.01 \%$ fewer manual training teachers; $8.01 \%$ fewer cooking teachers; $\$ 35,000$ less in salaries required to provide for $20,0007 \mathrm{~A}-8 \mathrm{~B}$ pupils; $19.11 \%$ less expense for shop equipment
Intermediate school offers superior educational possibilities because it can offer (a) different courses of study to meet the needs of those planning "academic" courses, those entering vocational schools and those who must work as soon as legally permitted; (b) adaptation of instruction to different needs of two sexes; (c) classification of pupils by capacity; (d) promotion by subjects; (e) adaptation of school organization to fit pupils of 12-14 years for athletics, club work, social activities, self-government
As to Construction and Care of Buildings (Armstrong)
Beautifully built and well adapted to their respective uses
Temperature control system now employed is good
Schools are in the main well cleaned
Very little fault can be found with engineers and janitors when one considers the plants they are asked to operate
The architect has designed a very ingenious system of enclosed stairways

## As to Delays in Construction of Buildings (Armstrong)

Formal proceeding in acquiring sites is not actually adhered to: material decrease in delay results from cooperation of board of education committees, etc
Delay has decreased since board of estimate insisted on statement from board of education showing order of priority and proving use of population data and of other local surveys in selection of school sites
As to Ventilation (Baskerville-Winslow)
Air in all 32 typical schools visited [out of 527 buildings], some with natural and some with artificial ventilation, is in good condition, free from excess dust and bacteria, reasonably low in carbon dioxide, cool and well regulated
as to temperature, though somewhat dry; average of 600,000 dust particles per cu. ft. of air
No proof of presence of specific organic substances in respired air after extensive investigations by Dr. Lucas
Number of bacteria is normal for good indoor air, averaging less than 100 per cu. ft.
Of 1,800 determinations of school room temperature only $14 \%$ were over $71^{\circ}$

## CONDITIONS SAID TO NEED CORRECTION

Method of Examining and Rating Now Permits Selection of
Fact base: (1) documentary material, (2) special data in response to requests, (3) individual and group conferences, (4) visitation of 21 [out of 497] elementary schools, (5) critical examination of methods of work of boards and individuals constituting supervisory staff, detailed examination of many hundred reports of supervisory officers on efficiency of temporary license holders; many personal inspections of method used by district superintendents and principals in passing on qualifications of teachers; replies to four questions by four members of board who are nominated from eligible list by city superintendent to supervise conduct of examinations, direct all written and oral tests, personally interview all applicants, prepare papers, vote all matters of licensing, etc: Elliott report: 144 pages
The fact that there are in schools at the present time so many teachers possessing an inadequate and imperfect command of English points not only to a weakness in the examination system, but also to a laxity in the supervision by the principals and district superintendents who permit renewal of licenses
The methods and results of the teaching staff in the schools of the city to-day undoubtedly are open to criticism
Responsibility of board of examiners for character and fitness is transferred after appointment to district superintendent, directors and principals
Present board is too small to accomplish diverse duties
Well recognized tendency of such examining bodies is to become isolated from the situation under their control
If any criticism were to be made, it would be against the leniency of the board in passing persons of doubtful personal and linguistic qualifications
Having answer papers of written examinations read and rated by "considerable number of principals and teachers" as assistants, introduces numerous elements of unreliability

Dangers should be emphasized arising from the system of cramming and coaching for examinations that has grown up in the city
"Forced" professional preparation is all the more aggravated when attempted by those belonging to active supervisory or teaching staff
Classroom tests of those qualifying for principal's license are not a valid test of either teaching or supervisory capacity, because tests conducted under abnormal teaching conditions and standards of judgment applied are, in most instances, wholly unreliable measures of candidates' real efficiency
Rating of principals on 13 points by "majority" of district superintendents is a merely formal procedure. In "certain" cases, ratings of one year merely copied from report of preceding year
Work of principals not subjected to that cautious objective examination that should constitute the foundation of the ratings, if the ratings are worth making at all
Standards for "fit and meritorious service" are too uncertain and variable to guarantee the selection, retention and reward of those principals most fit and meritorious
Median age of St elementary principals appointed 1908-1912 is 36 for men and 44 for women; i.e., 11 men and 27 women appointed when 40 or over; 4 women at $45 ; 4$ at $46 ; 2$ at 49 ; 2 at $52 ; 1$ man at $45,46,47$
During three years 1909-1911, only $1 \%$ approximately of initial probationary licenses were refused permanency
Reports for renewal of temporary licenses are purely formal in great majority of cases on the part of both principal and district superintendent
Radically diverse standards are employed by supervisory officers in determining rencwal of teachers' licenses
General criticism of method of supervisory officers in reporting on work of teachers, will hold as applying to the approval of service as "fit and meritorious"
The relatively few disapprovals of service mean "in all probability" the employment of a very lenient standard by approving officers; of 1,984 teachers rated by district superintendents, only 11 were rated as non-meritorious in discipline; of 2,235 teachers rated by principals, only 11 rated as nonmeritorious in instruction, etc
Tendency is for district superintendent as matter of form to discount ratings given teachers by principals
Careful application in high schools of superior merit provision (as found by investigation and inspection by associate city superintendent, district superintendent and principal, and affirmed by majority of board of examiners) will result in more intelligent procedure in approving license renewals

## Plan and Fact Base Lacking for Investigation and Appraisal by General Supervisors or Board

## Fact base: See page 13: Elliott report

There is nowhere within the system a clear and conscious discrimination between those activities of control that are administrative in claracter, and those that are supervisory or inspectorial
The organization of the school system has been from the top down rather than from the bottom up, a procedure as obstructive to progress and real growth in education as it is in other institutions
Schools of the city are (1) under the continued necessity of reacting to a maximum amount of external administrative control; (2) influenced by a minimum amount of competent expert and constructive supervision; and (3) not receiving the benefits of regular inspection and of unbiased estimates of the value of their method and products
Altogether too little genuine and progressive leadership influences the work of the teachers or the accomplishment of pupils
"We have been brought into contact with many such persons (i.e., judicially tempered individuals within the system itself) who as teachers or principals or superintendents were willing to bring forward unbiased and substantial testimony bearing directly upon the objects of the investigation. However, except in the case of a few negligible and minor matters, they were expressly unwilling to permit themselves to appear as witnesses of record. The explanation for this disinclination invariably given was that the expression of critical judgments militated seriously against their professional standing and advancement"
Those responsible for school organization appear "intentionally or unintentionally" to have discouraged competent criticism and permitted incompetent criticism to undermine intelligent public confidence
Chief evil of the existing scheme of control is to be found in the disinclination to untilize experience of great body of teachers and supervisors
System suffers from lack of definite, detailed knowledge of its own working and its own cost
Officials charged with responsibility for administrative or supervisory duty appraise their own performances
"No outside agency could carry forward the work of inspection, of formulating impartial judgments of results, and of proposing new procedures without much friction and loss of energy"

## Board of Superintendents "Bureaucratic" and "Static" Fact base: See page 13: Elliott report

Board of $S$ associate superintendents and the city superintendent (chairman) with charter right of initiative in all educational matters, including nomination of teachers, recommendation of supplies and text books. suggestion of courses of study, direction of school organization and instruction, has failed to meet in any complete manner the obligation laid upon it
For the ready execution of administrative duties, it is an unwicldy and complicated organization
Does not appear to have any well defined qualification for nomination of district superintendents
Fully three-fourths of the matters before board (relating to leave of absence, assignment, transfer, nomination of teachers) could be cared for independently by the city superintendent acting in an administrative capacity
Minutes bristle with trivial items
One-quarter of the matters pertain to educational detail and supervisory policy that should be determined upon by those in actual contact with work of teachers and pupils
Usual order of procedure (checks and balances) would not be tolerated by a well-organized industrial or commercial establishment
System of geographic supervision (by district instead of by classes of work) now quite obviously yields a service of doubtful worth
Supervision of schools by division superintendents is ineffective, unwise and uneconomical, judged by their annual reports to the city superintendent
As supervisory officers, they are too far removed from actual conditions confronting teachers to render kinds of service most needed
For proper inspection and appraisal of work of schools a training and capacity radically different from those of administrative officers are required
For digest of the reply by the board of superintendents, see page 68

## District Superintendents "Notably Inert"

## Fact base: See page 13: Elliott report

Of 26 superintendents whose duties are (1) to keep district records and reports; (2) confer with teachers and principals; (3) inspect schools and work; (4) rate principals and teachers; (5) suspend teachers; (6) enforce compulsory attendance; (7) assign special teachers; (S) approve requisitions; (9) report on local school board meetings; (10) investigate complaints.-all but two or three are products of New

York education, training, experience ; this inbreeding is not a negligible factor of weakness
Qualifications for nomination of district superintendents are not defined
As deputy supervisors of the city superintendent their position is anomalous
Monthly reports are made out in a most formal manner
Very few are able to make any very clear distinction between administrative routine and supervision
Several say frankly that their major energies are consumed by clerical labor and office routine

## Directors and Teachers of Some Special Branches Unnecessary

## Fact base: See page 13: Elliott report

Number of special branch teachers increased from 305 in 1902, to 479 in 1910 (an increase of $57 \%$ while the average attendance increased $37 \%$ during the same period)
Special branches have not yet succeeded in attaining a recognized and guaranteed place in the program of studies in public schools
Conspicuous problem of special branches is found in the dearth of qualified and competent teachers
823 kindergarten teachers are supervised by one director and two assistants

Elementary Principals Mere Clerks, Not Supervising, Independent Initiators

## Fact base: See page 13: Elliott report

Principal is not recognizedly responsible for school organization and supervision in his school building; i.e., has no real supervisory independence or initiative, while practically all the constructive features of his work are under immediate control of assistant and district superintendents
Waste through system of appointing so-called additional teachers for clerical service; also waste from number and character of various monthly, annual and special statistical reports that must be submitted by principals
Approximately three-fourths of 84 elementary school principals appointed 1908-1912 received all education, training and experience in schools of New York
Less than $10 \%$ of those appointed had profitable experience in schools outside
Marked tendency toward inbreeding deprives system of the infusion of new blood, both in teachers and supervisors, required for its progressive development

# Superintendents' Time Wasted On Clerical Routine 

> Fact base: Communications filed in the offices of the city superintendent and associate superintendents; personal interviews: Averill report: 50 pages

Clerical routine work consumes altogether too much time of the city superintendent, associate superintendents and other directing officers, to the necessary neglect of supervisory educational work
The lack of a central information office entails a waste of clerical assistance and leads to the acquisition and giving out of information of questionable reliability, and to the making of defective records
Since there are no printed blank forms for many kinds of commumications a great amount of time is sacrificed in dictating and typewriting recurrent matters, thus both increasing the cost of such work and diverting attention from educational supervision. Nearly $52 \%$ of all letters examined might have been attended to by subordinates
The permission of the city superintendent is required in altogether too many minor matters, before action by supervisory officers
Of the first 316 letters found in the files examined, which were sent out by the city superintendent from 1908 to 1911, only 29 represented matters in which the city superintendent initiated the correspondence; the rest were answers
There is lack of care, system and uniformity in filing letters, recent letters being found in files for obsolete material, letters belonging in one room being in another, etc
Actual authority is not delegated to those whose judgment would warrant it; i.e., principals may not grant teachers permission to visit other schools, etc
Even where authority is delegated to individuals, it is not used
A division of labor is lacking in the offices of associate superintendents. for each office appears to be writing letters on any subject whatever as inquiries come to it
Only 82 out of 500 recommendations during three and onehalf years are from $S$ assistant city superintendents
Only 23 out of 500 recommendations are from 23 district superintendents
Only. 30 out of 500 recommendations are from nearly 600 principals of schools
Leesa than one suggestion for the betterment of the school system was found in the records per seven supervisors in three and ne-half years; i.e., the records show that only 102 recommendations were made by 749 principals, supervisors, directors and board members
Of the reenmmendations which tonched such vital questions as part time, discipline, attendance and retardation, only one per cent. emanated from 749 supervisors

Negotiations, particularly those of the board of superintendents, consume an unnccessarily long time, partly because of the number of hands through which negotiations are passed before being completed
Attempts to cooperate on the part of the public and private agencies are seldom encouraged and frequently ignored or discouraged
Of 500 recommendations, of which without previous knowledge of action, 75 were examined in detail because they seemed to be the most important, 14 were acted on favorably, 26 showed no record of any attention paid to them, 7 were merely acknowledged, 15 were marked "for no consideration," 5 were replied to in an indefinite way, 8 were acted upon unfavorably
Local school boards have apparently been tolerated, ignored or regarded as a relic of a system now fallen into disuse
Thousands of dollars have been lost each year because the problem of teachers' absences had not been faced squarely in spite of protracted correspondence showing that facts were no longer in dispute. [Between the making and submission of this report the board of education decided to deduct, on account of absence, $1 / 300$ of a year's salary instead of $1 / 360]$
Pleas for reversal of adverse decisions are entertained with a freedom which undermines the proper control of the teaching force

## Elementary Teachers "Static and Depressed"

Fact base: Visits by 12 different persons to 60 [out of 496] elementary schools; study of 300 recitations "for all or most" of 300 periods [out of 100,000 possible]; consultation with not less than 100 [out of 15,157 ] teachers and [out of 840] supervisors and principals; application to 19 typical recitations, four standards of "motivation," "evaluation," "organization" and "initiative"; "conclusions are immediate result of facts gained at first hand and verified by extensive study of curricula and syllabus, and of supervision by principals": McMurry report: 142 pages
Instruction is, in spite of many exceptions, on a low plane, poor in quality, and discouraging for the future
Not one of the standards proposed for judging instruction is satisfactorily met
Inculcating of purposes in pupils is scarcely thought of in actual classroom work
No evidence that stress is laid on organization of children's ideas
No time is given to children's weighing of values

Almost no planming for pupils' growth in self-reliance or self expression through instruction; teacher puts the questions, makes the corrections and immediately directs every turn that is made
In quite a number of kindergartens, dictation exercises and readymade play are so prominent that they directly oppose self-expression and self-reliance
Kindergartens (without these defects) and elementary schools fail to harmonize: primary instruction tends to mullify important lines of influence begun in kindergarten; dualism within a single system is most wasteful
Majority of teachers and principals seem reconciled to educational theory that (1) there is scarcely a limit to the necessity for miformity; (2) principal subject matter is what is automatically usable; (3) accuracy in detail is the leading element in scholarship; (4) knowledge is given for use in the distant future, not now
According to conviction held by teachers [number not given], teachers' attitude is not satisfactory because they are: (1) hampered by lack of authority to punish children; (2) not free to change curriculum, choose text books, determine methods; (3) not developing initiative or self-expression; (4) without inspired leadership; (5) not discussing aims and principles
Any independent efforts of teachers to reorganize subject matter. stress relative values or provide for motive in an original manner, would run the risk of disapproval by their superiors
Investigators were unable to discover either any general striving toward the higher aims of instruction or even signs of such gencral striving

## Discipline Deficient

## Fact base: See page 19: "Numerous conversations with teachers and principals and correspondence also": McMurry report

By-law prohibiting corporal punishment often ignored
Common practice for principal to "smooth over the case" or to ignore it outright, leaving to classroom teacher the responsibility of getting on with each pupil as best she can
Sulstitutes "more cruel than corporal punishment" are commonly applied
Large number of children are extremely disobedient and disorderly
Accommodations in truant, disciplinary and parental schools are not sufficient, and often not what many of these semiincorrigible children need
Red tape of commitment causes delay and takes much time of principal with possible uncertain outcome

## Elementary Curriculum Out of Date

> Judgment base: Four standards applied to printed statements in curriculum and syllabi on all subjects except history, civics, penmanship and foreign language: (1) relation of subject matter to children's purposes; (2) tendency to call forth initiative in children and teachers; (3) kind and degree of organization of subject matter; (4) attention to relative values: McMurry report

Barring a few exceptions the curriculum and syllabi could botlo easily have applied twenty years ago
"One naturally suspects that such a course and truancy are closely related"
Syllabi merely inform ; fail to inspire good teachers; directly limit them to low ideals
Most striking fact about curriculum and syllabi is want of educational leadership they display
Syllabi do not allow freedom of teachers to grow or offer positive aids to growth
Little attention to correlation of subjects
Almost no refcrence to importance of teaching children to study alone

## Kindergarten

Overemphasis in some quarters of more formal values, technique, precision, exact imitation

## Reading and Literature

Offering too narrow; neglects current literature; no freedom for developinent of special taste; as a whole, striking overemphasis of minor parts of good reading, i.e., of form in distinction from thought; arbitrary offering to teachers of suggestions on methods

## Composition and Grammar

Ignore need of motive for expression of thought; grammar is crowding out other more necessary work; syllabus omits emphasis on fitness and force ; importance of correlation between literature and composition is not recognized : imitation is made so prominent that individuality of children is endangered; suggestions for development of originality are wanting; directions to teachers seriously limit freedom; adaptation to individual conditions of schools is prevented

## Spelling

Little reference to reviewing and testing words in actual sentence; suggestions about how to present new words are too limited ; value of proper enunciation is slighted

Music
No effort to define or suggest good materials; lack of definite requirements for application or scholarship tends to reduce singing to mere entertainment exercise; music as planned is purely technical ; peculiar disregard of individuality

## Nature Study and Elementary Science

No provision for relation to liuman life ; completely out of line with elementary education; uniform syllabus for all schools is equally undesirable and unsatisfactory; topics are isolated; ability of teachers to give instruction varies even more than ability to teach music; material provided is inadequate; syllabus meeds supplementing; course ignores interest on part of young people ; enmmerates topics rather than offers an original outline; little opportunity for correlation with other subjects; self-expression of teacher is circumscribed

## Arithmetic

Organization is relentlessly logical ; rigid sequence of subject matter: contains many things of doubtful value which if omitted would reduce course from eight to six years; bears no relation to practical affairs; little provision for pupils' motivation; cxcessive amount of drill; destitute of suggestions for supplementary work ; extremely difficult for teachers or pupils to exercise initiative

## Drawing, Construction Work, Cooking, Sewing

No direct relationship between drawings and projects actually constructed in a shop or elsewhere; teclmical efficiency is chief end point ; organization is almost solely on a mechanical basis and correlation (except for cooking) is omitted; motivation is not considered a problem at all

## Geography

No consideration of children's interest; fixed sequence and uniformity of approach for all children; insistence on one fixed order seriously interferes with exercise of initiative by teachers and pupils; no plan for close correlation between geagraphy. history, good citizenship and nature study; course shows no influence from educational thought during last 25 years; not enough time allotted to course
Physical Training
In many schools, mo facilities for romning, folk-dancing and athletics: teachers are mot trained to do this kind of work and have little interest in it ; curriculum composed chiefly of gromnastics. planned from adult viewpoint exclusively; markel emphasis on posture and coordination; lacks cmphasis on more vital and real elements in physical edu-
cation ; children held down to dull monotony of teacher's count; teacher has as little opportunity for originality, choice and initiative as the child

## Hygiene

Entirely neglected in "many of the schools"; undue emphasis placed on more formal and less valuable parts; principally list of topics that supposedly a child ought to know; little provision for exercise of individuality of teachers and pupils

## Elementary Principals Ineffective as Supervisors

> Judgment base: See page 19: 32 replies from a questionnaire sent to 83 principals: four standards; (1) proportion of time spent in supervision; ; (2) charatcer of supervision; (3) manner of rating teachers; (4) method of supervision, applied to certain principals [number not told]: McMurry report

Amount of time spent by a principal with any one teacher at any one time is extremely small; average six minutes
No remarks are as a rule made to teacher after watching recitation
Office interviews with teachers are notably short, three or four minutes; given without preparation by principal
One hundred teachers [number questioned not stated] expressed opinions that practically no help is given to teachers by principals
Teachers' conferences give small place to instruction, discussion is rare, effect is to depress rather than stimulate teachers
Common for teachers to declare that fear of punishment by low mark prevents freedom of expression
Two-thirds of time and energy of principals devoted to administrative duties
Little distinction is made in practice by principals between administrative and supervising duties
Principals exhausted by constantly pressing details of administration
Large schools intensify pressure of administrative work
Appointment of assistant principals does not remedy this evil as they do mostly clerical work; great waste of money at this point

## Elementary Principals Lack Authority

## Fact base: See page 19: McMurry report

Have no anthority in choice of studies, with the exception of one slight option in the eighth grade; practically no authority as to content ; and only slight degree of freedom in allotting time to separate branches and subjects

Are forestalled by the syllabi which set narrow limits for teachers and omit reference to aims and principles
Are directly subject to the district superintendent who rates them
Teachers are inclined to look to district superintendent (who rates them also) as their head rather than to principal
Principals have no control over special supervisors
Some assert outright they are merely agents of the district superintendent
Frequency of rating teachers makes examinations unnecessarily prominent
Rating list of following 17 points is inadequate, important for what it does not include, and fails to suggest any of the purposes of teaching: ability to comprehend instructions; ability to cooperate with other teachers: skill in blackboard work: skill in questioning; skill in presentation; use of objective illustrations: power to interest: thoroughness of drill: self-control and manners; use of English language: use of voice; attendance: punctuality ; personal tidiness; accuracy in keeping records and making records; control of class: energy and success in self-improvement
Uniformity of method is at great premium in New York and affects principals' theory of supervision which becomes the mere prescribing of certain series of "steps," eight or more, "an established procedure" for teaching each topic
Neither voluntary nor required reports of principals to board of superintendents in last five years show concern about either the theory or practice of supervision of instruction
Relation of principals to their superior officers does not allow them to make recommendations to those officers to which the latter are under obligations to reply

## Age-Grade Reports "Inaccurate and Unreliable"

## Fact base: City superintendent's annual reports, 1905-1911: Bachman report on overage: 52 pages

After-Jume-promotion grades have been given since 1905; be-fore-June-promotion grades were given in 1904; in subsequent comparisons of 1904 with later years, no mention of the change in base
By comparing after-promotion grade totals in 1905 with be-fore-promotion grade totals of 1904, a decrease of $7 \%$ in overage children ( $30 \%$ to $32 \%$ ) was shown: an increase of $2 \%$ (from $39 \%$ to $41 \%$ ) would have been shown had 1905 before-promotion figures been compared with 1904 beforepromotion figures
A $4 \%$ understatement of overage is due to putting into eight "years" the facts for 16 "grades" instead of reporting the 16 half-year grades separately

A $12 \%$ understatement is due to comparing June ages with after-promotion (i.c., next year's) grades rather than with before-promotion (i.c., Junc) grades
An $18 \%$ understatement is due to using up-to- 15 instead of up-to- $1+1 / 2$ as the normal age for completing the eight grade 30,995 pupils who left Jantuary-June, 1911, are not included in age-grade reports
28,838 children in special classes for overage and "working certificate," and "non-English speaking" pupils are excluded from age-grade comparative reports, as are all pupils in ungraded classes for the feebleminded, the blind, deaf, crippled
$66.57 \%$ of New York's elementary pupils would have been shown to lee overage by a correct age-grade report, instead of $23.22 \%$, as reported by the city superintendent. [The investigator's "correct" table would not include "underaged" or "normal aged" children who had failed one or more times within, for example, the "up-to-7t/2" year limit for being in the first grade, June 30. B. M. R.]
Age grade conditions not for the full official year but for part of the pupils for the second term only, are shown by present reports
Definite information useful to principals and teachers in classifying and instructing children is not supplied

## Reports on Non-Promotion "Incomplete" and "Misleading"

> Fact base: Figures in annual reports of the city superintendent; returns from questionnaire sent to all elementary principals and teachers concerning 569,612 children June term 1911, not register at the the end of Februarg Jung the echildren who left before end of term: ( $63 \%$ of principals' answers contained errors): motion: 115 pages

Blanks prepared by city superintendent could not be tabulated in more than one way; directions to principals were inadequate
Most frequent rate of promotion (made last day of term, not during term) is from 89 to $90 \%$, with exception of 1 A ( $76 \%$ ) and 8B $(97 \%)$

## Unnecessary Clogging in 1 A

10,314 pupils in 1A were left back in June to re-enter this grade in September, to overcrowd classes and to congest the schools
Causes were inability to use English language, part time, immaturity, oversized classes (minor factors) and absence
Of pupils absent 10 days and less $89 \%$ were promoted; only $40 \%$ of those absent 41 days and more were promoted

## Non-Promotion Largely Due to Absence

One registered pupil in 19 was absent 41 days and above
Absences in two lowest grades are particularly large because pupils are young, amount of sickness is greater, schoolgoing habit not yet acquired, parents do not feel necessity of regular attendance
Lowest absence rate in SB grade, $4.83 \%$ absent 21 days and more compared with $13.90 \%$ in 5 A and $39.73 \%$ in 1 A
Rate of promotion varies inversely with absence; of those absent 10 days and less, $6 \%$ were not promoted, while of those absent 41 days and above, $47 \%$ were not promoted

## Non-Promotion Not Increased by Large Classes

Of $56 S .612$ pupils June 30, 1911, $13 \%$ were in classes having more than 50
Oversize classes were confined June, 1911, to 6B and lower grades
1A has largest number of large classes
Number of oversized classes (over 50 ) could be reduced 10: by (1) standardizing classrooms; (2) forming mixed classes in grades 1A-6B; (3) care of principals in organizing classes; (4) putting groups of pupils from 2 grades in one class
Data not at hand to show to what extent classes having over 50 offer less favorable opportunities for work than do smaller classes
Teachers and school officials stated that classes over 50 should be eliminated and all classes be reduced to at least not more than 45 pupils; yet rate of promotion in all grades, excepting 1A, was the same in classes of 50 and under

## Non-Promotion Increased by Overage

Fact base: Above figures and age-grade standards used by city superintendent; ages for June 30, 1911
215.333 or $37.87 \%$ children were above normal age, according to reports to school inquiry committee [rate given by city superintendent was $23.3 \%$ ]
Of these $5 \sigma^{\prime} \%$ are less than one year behind their grade, $29 \%$ one and two years behind; $10 \%$ two and three years behind
Pupils between one and two years overage drop out in increasing numbers after 6B grade
Pupil, letween two and three years overage leave after 5A
Rate of nom-promotion for overage pupils was higher from 4 to $10 \%$ than for pupils of normal age except in 1 A grade: werage children tend to fall farther and farther behind

## Inability to Use English Language Reduces Promotions Special fact base: Principals' estimate of reasons for non-promotion

Rate of promotion for pupils using English was $19 \%$ higher than for those unable to nise it
School work of 8,739 pupils in total register of regular classes was interfered with by inability to use English; $55 \%$ of these in 1A and 1B grades
Presence of these pupils had no material effect on rate of promotion of their grades as a whole

Part Time Slight Factor in Non-Promotion
68,610 children on part time June 30, 1911 ; [90,000, Sept., 1912] of whom $24 \%$ were in $1 \mathrm{~A}, 22 \%$ in $1 \mathrm{~B}, 13 \%$ in 2 A , $12 \%$ in 2B, $27 \%$ above second grade; $11 \%$ above third grade ; in four different kinds of part time classes-a.m., p.m.; alternating morning and afternoon; and Ettinger part time classes
Children in part time classes are in school $33 / 4$ to 4 hours; though Ettinger part time classes have a five-hour school day and a considerable number of children receive not only a whole day's schooling but a considerable amount of personal attention
From one to seven more pupils out of each hundred pupils were promoted in Ettinger part time classes than in whole time classes in the same grade; yet of 68,610 pupils on part time only S\% were in Ettinger, $64 \%$ in alternating, $13 \%$ in morning and $13 \%$ in afternoon classes
Educational superiority of Ettinger classes over whole time classes not yet proved
In $4 \mathrm{~A}, 4 \mathrm{~B}$ and 6 B grades promotion rate in whole time classes is lower by . 6 of $1 \%$ than in part time classes ; in other nine grades promotion rate higher by less than $2 \%$ than in whole time classes
782 less cliildren promoted among 68,610 part time pupils (all grades) than wonld have been promoted if rate in whole time classes were applied
On the basis of rate of promotion, alternating part time classes afford less favorable opportunities for advancement than whole time classes; in grades 1A-3B from one to three fewer pupils per hundred were promoted
Opportunities for advancement in a.m. and p.m. classes combined are less favorable than in whole time classes; from one to five less pupils are promoted per hundred
No practical difference between rate of promotion in alternating and in a.m. and p.m. part time classes combined
Part time has slight direct effect on promotions; probably has no effect on increasing congestion; though there may be important indirect effects including indifference to school work, bad conduct and truancy

Putting on part time the 60,166 whole time pupils in 1.A and 1 B grades would free enough rooms to eliminate the major portion of part time in classes from grades above 1B

## Pupils Leaving Elementary School Not Studied

No reports have ever been made for whole city on number leaving elementary schools and reasons therefor
15.857 hoys and $15,1+8$ girls ( $5 \%$ of total emrollment) dropped ont during Febrnary-June term, 1911
Losses from 14 to 15 years were $20 \%$ of total losses; from $15-16,1 t^{\%} \%$; from 16 to 17 years, $7 \%$
$55 \%$ of pupils leaving regular classes were under $1+$ years
$51 \%$ of these were subject to compulsory education law
Fact that no account is taken of thousands of pupils leaving school leads to a defect in certain of the reports of the city superintendent
Report on ages made by city superintendent includes only pupils on register at end of term and omits 30,995 children leaving regular classes during term
Impussible to solve problem of elimination when reports of pupils leaving and reasons therefor are not tabulated

## "Forced Promotions"

Fact that rate of promotion was uniformly about $90 \%$ gives weight to statement made repeatedly by teachers and principals [number not given] that they were "unofficially expected" to promote approximately $90 \%$
Increase in rate of promotion in the February-June, 1911, was $4 \%$ over rate for same term, 1910, an unusually large increase for New York City. When dute allowance is made for whatever increase in efficiency there may have been, it must be admitted by all who are acquainted with schonl conditions and school work that this extraordinary increase was due in most part to the "pressure" exercised by the city superintendent of schools "to secure more gencrous promotions"
No decrease in requirements was made to permit larger number of legitimate promotions
Teachers "felt forced" to promote even children not fit for promotion, thongh variations in rate of promotion (1) with absence, overage, etc.. (2) in different schools, (3) in same grade of different schools, (4) in different grades of same school, indicate that promotions were made on judgment, not on a mere mechanical basis
Rate of promotion nught ultimately to be about $100 \%$
Conditions Favorable to Maximum Promotions not Encouraged
Variations in promotion rate in different grades, schools and districts give little support to the thought that the maximum rate has been attained

No one actually knows whether the best age of entrance to elementary school is five, six, seven or older; therefore best to follow custom of making six lower age limit
General agreement that children cannot be kept with profit under the regime of the elementary school much beyond the beginning of pubescence, i.e., 14 years
Little regard paid to desirable limits of elementary school period (six to 14) as based on custom of entering at six, and on average age of reaching maturity, 14
$64 \%$ of children from 13 to 14 years old (1905-1908) continued in school one additional year, $27 \%$ two additional years; 7\% three or more additional years
Actual length of attendance in elementary schools averages only seven years for children reaching fourteenth birthday
Of those graduating in last six years, $23 \%$ were under 14 , $36 \%$ from 14 to $15,27 \%$ from 15 to $16,10 \%$ from 16 to 17
Actual total length of present elementary course exceeds by from one to four years the actual time that $76 \%$ of pupils are in attendance by their fourtcenth birthday
Of all pupils entering, but $88 \%$ reach sixth grade, $61 \%$ the seventh grade, $47 \%$ the eighth grade, only $41 \%$ are ever able to complete the course
No consideration is given to varying abilities of children due to home conditions, foreign parentage, financial status
No one knows with exactness how long the present course of study is
Arbitrary high school entrance requirements and arbitrary assumptions of what elementary school graduates ought to know determine rate of promotion, though rate can only be determined in view of rapidity with which normal children in regular attendance must advance in order to finish an entire elementary course of study

## Wrong Method Used in Estimating Teachers Needed in Elementary Schools

## Fact base: Estimates, discussions, budgets, official records, register, attendance: Bachman report on estimating teachers needed: 73 pages

Facts have not been presented by the board of education in the past to demonstrate clearly the needs of the schools
In 1911 teachers were requested for 6,000 more pupils than there were reasons to expect; i.e., 28,000 , the estimated increase in register, was the average increase of December over the preceding May for the years 1902-1909, whereas the average increase of December over preceding December for these same years was 21,707
Estimates for 1912 and 1913 were respectively 3,500 and 7,000 higher than the highest estimate that would probably have been made had principals, when estimating, taken into ac-
count the losses of pupils in advancing from grade to grade and the actual increases in such grades in previous years
The district mint used for 1913 has four defects: (a) no uniformity in method of making estimates, which cannot be verified, (1,) tabulation of total register supplies no basis for estimating distribution be grades and by kinds of classes, (c) no data to determine where more or fewer classes are needed, (d) no data on number of months for which new teachers will be necessary
Temporary absence of children on account of weather and holidays reduces mumber of pupils in average daily attendance, but in no wise lessens the actual needs for teachers
Average daily attendance should not be made basis of budgetary estimates because (1) represents minimum, not total, service of school, (2) varies directly with weather, illness and holy days, (3) no exact relation between it and expenditures for instruction, (4) more variable than register
Present monthly register shows only number of pupils at the end of month, includes transferred pupils and others who have not been in school one full day, but excludes discharges even when they have been in school during the month
Estimating increase by individual schools is inaccurate becanse: (1) little uniformity in rise and fall of register of each, (2) changes in neighborhood make forecasting impossible. (3) impossible to forecast distribution among grades and classes, (4) cost of operating in past year not reliable index

## Preventable Truancy Not Prevented

> Fact base: Published reports of city superintendent, associate in charge, and permanent census board, etc: manuscript reports of district superintendents, office records, "numerous conferences": Burks report: 75 pages

Annual rejorts of district superintendents have never been publiched separately or utilized for comparative study of methods as a basis for administrative standardization
Reports for 1910-1911 compared as to 23 items prove extraordinary variation in practice which is completely hidden by the gross figures of the published report
Variations in practice relate to 20 different matters including number of truancy cases reinvestigated, number of times chiddren found truant were returned to school, number placed on probation, number of cases per attendance officer
Weekly and monthly reports of attendance officers are ambiguous and incoherent
No alphabetical lists for cumulative data under each case; therefnre is impossible for attendance officers to deal with children in light of past experience

Daily time and service records of officers are too general to be of value in supervision
No gencral. clearly defined standards of procedure for conducting preliminary investigations
Forms used by principals in referring cases limit information to most obvious and superficial facts about each child
Unnecessary repetition of records kept by principals and attendance officers
Length of interval between reference of casc and attendance officers' report varies from 48 hours to over 16 days
Data included in statistical reports of attendance officers, if properly analyzed, classified and interpreted, would serve as an invaluable commentary on city's program of education, health conservation, charitable relief and police protection
Value of annual report as a source of information is scriously limited (1) by the omission of important data, (2) by unanalyzed totals, (3) by defective arrangement, (4) by clerical inaccuracies, (5) by arbitrary adjustments to "force balances" that were assumed to be called for in certain groups of items, and (6) by variation in definition of terms employed
No one individual in the organization is charged with complete authority and responsibility for general administrative control
Limits of authority and responsibility of each member of the organization are not clearly defined and described
No adequate provision for field supervision and inspection of work of attendance officers
No special provision made for specialization of attendance officers in coercive discipline, prosecution of court cases, social service, etc
No systematic provision for most effective working relations with department of health, state labor department, public and private agencies actually or potentially cooperating with the compulsory attendance service
Attendance service directed at present to performance of police functions, rather than to the discovery and treatment of deeper causes of truancy
Of 90,000 children absent for at least one month, FebruaryJune, 1913 ( 30,000 absent over two full school months), only 6,579 children were reported by officers as having been truants for five days or more during entire year
Very large number of children by sporadic absence for trivial causes lessen their own chance for satisfactory progress in school
Failure to secure money for 20 additional officers in 1912 due to lack of competent evidence that additional officers were needed and the failure to reorganize department as proposed by the associate superintendent in his 1908 report

Ungraded Classes for Feeble-Minded Inadequate in Number Equipment and Teaching


#### Abstract

Fact base: Examination of 46 [out of 2,500] children in three [out of 31] ungraded [feeble-minded] classes; of 81 [out of 25,000 ] children in " $E$ " [overage] classes; of 22 [out of 2,461] children in "D" [working paper classes]; of 115 [out of 666,538 ] children in regular grades in five schools; of five cases in one high school: visits by the investigator in person to 125 classes [out of 131 with 2,500 children] in 95 schools; suggestions from teachers and principals "wherever possible"; application of results of "most extensive study ever made" with Binet test in a Southern Jersey town which showed that $2 \%$ of 2,000 public school children are feeble-minded: Goddard report: 23 pages


There were in 1911, 15,000 feeble-minded children in New York's public schools
Some normal children are in classes set aside for fceble-minded Five high school children selected by teacher were found to be feeble-minded, because according to the teacher "they were not allowed to stay more than two years in any one grade so they are promoted whether they are fit or not"
Of th children examined in ungraded classes, 29 were distinctly feeble-minded, 14 probably so
Of 81 children examined in special "E" (overage) classes, more than one-third were distinctly feeble-minded; probably 2,500 defective children in these classes alone
Of 22 children examined in special "D" classes (preparing for working certificates) $40 \%$ were found feeble-minded; probably 1.000 feeble-minded children in this group alone
Of 115 selected children in regular grades of five representative schools 33 were distinctly feeble minded and 30 more were border line cases
Probably high percentage of 1,464 children in "C" (non-English speaking classes) and of 490 children in classes for cripples are feeble-minded
Many feeble-minded children who are crippled, blind or deaf are shut out of public school
Large numbers of feeble-minded children probably in schools not "public"
Nearly all teachers feel that ungraded classes should not be in regular schools and that these children should be in institutions. but admit that very few parents would allow it
Method of choosing children for ungraded classes inadequate because (1) grade teachers are not able to recognize the moron, (2) pride of principals and teachers sometimes prevents. (3) physical defects complicate diagnosis
All grades of mental incapacity in same ungraded class; no opportunity of grouping according to capability

Bookwork all forenoon felt by teachers to be largely wasted on children in ungraded classes
Very general effort on part of teachers to get some of these children back in the grades
Teachers of the grades who had taken these children back sometimes reported that they ought not to have been sent back
No records kept of progress and history of children; no basis for conclusions about methods of teaching
Very few classes have any adequate supply of material to work on; some of them, indeed, have not any equipment
Rooms are not equipped for this kind of teaching
Teachers of ungraded classes have not had adequate training; certified teachers found in these classes who are in no way fitted for the work
Practically impossible to obtain an adequate supply of trained teachers
Little or no supervision of these classes; the one inspector has 131 classes scattered all over Greater New York
Principals of schools in which there are classes have no official responsibility for them
Of 497 elementary schools. 402 have no ungraded classes

## Efficiency Low in Arithmetic

Fact base: Eight Courtis tests [five with 20 examples each, one with 16 , one 19 , one 8] applied to onetenth the number of pupils in grades $4 \mathrm{~A}-8 \mathrm{~B}$, and to one general and one commercial high school, in all, 33,350 children in 90 classes in 52 schools (27,171 records); tests in speed for (1) addition, (2) subtraction, (3) multiplication, (4) division, (5) copying figures, (6) reasoning in simple one-step problems, (7) fundamentals (abstract examples in the four operations), and (8) reasoning in two-step operations, cited by Prof. Hanus as "illustration of the scientific method of investigating and appraising educational results": Courtis report: 158 pages
In view of effort, time and money expended, conditions could hardly be worse; great inefficiency and inaccuracy in speed and reasoning
Study more than justifies the severest criticism of the efficiency of training in arithmetic afforded by the public schools that has yet been made by the "man on the street"
Class averages of one school were abnormally high and its results rejected altogether. (Testimony of one child as to illegitimate preparation)
Of 1,000 boys, 13 only could do accurately examples like those in Test 7 (fundamentals) at speed of 1.5 examples or better a minute; 336 could do accurately one example a minute; 773 could do accurately one example in $11 / 2$ minutes; 850 could do accurately one example in two minutes

Ont basis of one example per minute nine boys of 1,000 in 4 th grade can qualify in speed, none can qualify in accuracy
Training in grades 5 to 6 enables $86 \%$ of class to qualify in speed and but $34 \%$ in accuracy
Low efficiency due to neglect of difference in powers and capabilities of individual children
$\mathrm{SO}_{\mathrm{O}} \%$ of children in each grade could be replaced by an equal number of children from the grade above without changing in the slightest the ability of the grade in the first test
Of 5.670 sixth grade children tested for ability in the multiplication tables, $18 \%$ had score lower than average of the th grade. $38 \%$ lower than the average for the 5th grade, $48 \%$ exceeded the average for the 6 th grade, $38 \%$ exceeded average for the 7 th grade
Differences among individuals within a grade greatly exceed differences between grade averages
Difference betwen the grade averages of any two 6B classes chosen at random will be on the average much smaller than the difference between the scores of two individuals, also chosen at random from either class
Knowledge of the tables is not in itself any guarantee of ability to work examples
In spite of strenuous and conscientious efforts of the New York teachers, that so slight an advantage (gain in speed) has resulted bears eloquent testimony to uselessness of attempting to work changes in children without a knowledge of the factors involved
Careful study over years of repeated measurements of same individuals fails to disclose any basis of classification on which to place scheme of uniform instruction on different topics, like addition, subtraction, etc
Test of 50 employees of John Wanamaker's store (average length of employment two years, average age, 19) shows that standard required by employer could be met by only $31 \%$ of SB boys and $56 \%$ of SB girls
Comparison of results in one general and one commercial high school, shows that commercial work produces marked differences only in addition and subtraction tests
Boys in commercial high school show no greater development in speed of work than they would have done had they taken the general course, while the girls show less
One-half of the boys and one-third of the girls are more accurate than they would have been had they not taken commercial work
Differences in the effect of work in these two schools are slight

That unsatisfactory achievements in fundamentals are not changed during the period of preparation for commercial life is not favorable to the success of the work of the commercial courses
Tendency of pupils in part time classes is to fall below average of their grades
Girls' classes exceed all others slightly in speed, markedly in accuracy
Gross differences in mental ability are likely to arise from differences in parentage, social station and physical growth
Gross inefficiency of present conditions is caused by lack of exact knowledge of conditions acted upon and of effects produced
In tests for speed and accuracy question of forcign parentage does not seem to affect work
Average child in New York City will be able to do abstract work rapidly, but inaccurately; simple reasoning work slowly
New York averages compared witl standard scores show children slightly better in speed but correspondingly worse in accuracy, and very poor in reasoning
General use of practice test increases speed but decreases accuracy; too much drill is harmful

## Standard Size for High School Sections Not Met <br> Fact base: 656 German classes in 20 high schools; standard of 30 pupils per section set by associate superintendent in charge: Ballou report: 142 pages

Great variation in the size of sections among (20) different high schools and among different classes (average 32 classes) in each high school
All high schools have sections with 25 or less pupils; all but two have sections with 18 pupils or less
There are sections with five, six and seven pupils
There are sections with $50,55,60,65$ pupils
$29 \%$ of 656 sections in German have under 25 or over 40 pupils
When standard of associate superintendent in charge (30 to 40 pupils) is applied to German sections only $51 \%$ come within standard
Practice of organizing first term pupils into sections of 40 or more pupils must be emphatically condemned
Redistribution of pupils would have avoided $93 \%$ of first term sections with less than 30 pupils; $94 \%$ of first term sections with over $40 ; 75 \%$ of sections above the first term with less than 30 ; and $95 \%$ of these sections with over 35
Detailed study of organization in three selected high schools shows that in most cases most small sections are result of bad distribution by principal; most large sections are unnecessary and indefensible

Large sections canmot he defended on ground that proper ntumber of teachers is lacking; duty of principal and board of superintendents to secure the teachers needed
No well organized experiments have ever been undertaken to determine the number of high school pupils which should constitute a recitation section

## Department Chairmen Ineffective as Supervisors

## Fact base: Assignments of 116 chairmen of departments in 20 high schools; standard of periods set by associate superintendent in charge: Ballou report

In 12 large high schools (with over 1,000 pupils) $75 \%$ of chairmen are teaching more periods than maximum standard ( 12 to 15 periods) fixed by associate superintendent in charge
In eight small high schools (with $248-983$ pupils) $86 \%$ of chairmen are teaching more periods than the maximum standard ( 15 to 18 periods)
Two periods a week of study hall supervision is averaged by all chairmen
In large high schools, average four periods a week (instead of 11 as intended) left for supervision of department and administrative duties assigned by the principal (only $40 \%$ of intended time)
In smaller high schools, one period only left for supervision, etc. ( $19 \mathrm{~F}_{\mathrm{c}}$ of intended time)
Too little supervision of classroom instruction because of prominence of administrative duties
Clerical work which might be done by highly paid employees takes time away from supervision

## High School Teachers Work More Than Standard Hours

> Fact base: Study of 671 teachers in English, German, mathematics, biology and history in all high schools; standard set by associate superintendent in charge: Ballou report

Number of periods of teaching varies from 6 to $3+$ in English, 18 to 28 in German, 4 to 28 in mathematics, 15 to 28 in biolngy. 7 to 25 in history
82': of teachers are teaching 20 to 25 periods; $15 \%$ less than 20; 2 " $;$ more than 25 perinds
32 ? 1 of $2 \sqrt{6}$ teachers in English are teaching more than established standard periods (20 to 21)
$1 t^{\prime}$ \% of 4 th teachers in other subjects are not teaching in accordance with established standard ( 20 to 25 periods)
$75 \%$ of 6,1 teachers are doing an average of more than 25 periods of teaching and study hall supervision

Over $50 \%$ of these teachers are also carrying other administrative and clerical responsibilities, including recess and corridor assignments, sororities, school publications, athletics. supplies, lunch room, bulletin boards
Administrative duties of teachers include charge of an official class room and its supplies, records, etc., requiring an average of five hours a week [based on study of six high schools]
Number of clerks is not sufficient [no examination of work made]
"It is absurd to require teachers to perform clerical work which could be performed better by clerks at from onethird to one-half the salary"
"Further, it is equally absurd to expect teachers to do a full day's work in teaching and then perform administrative functions after school hours or as 'odd jobs'"
Over $15 \%$ of 671 teachers are teaching less than minimum standard (20 periods) because of work other than teaching

## High School Organization Defective

## Fact base: See page 35: Number of classrooms, teachers, pupils in 20 high schools and their annexes; course of study: Ballou report

Study of principals' daily program had never been made by superintendent
Time allotments for studies in every course of study are haphazard
Attempt made in every school building to care for more students than building was designed for
Method of increasing or decreasing number of teachers does not provide teachers where they are needed, because data for such reorganization are inadequate
Control of factors affecting organization of high schools lies with department of education rather than with principal
Board of superintendents in determining curricula has not considered (1) relation of curricula in one school to size of sections, (2) relation of electives to cost of instruction, (3) relation of daily program to time allotments for subjects
In 10 high schools with more than 1,500 pupils each, organization cannot be effective because (1) it is impossible for a principal to discharge his duty to pupils, parents, teachers; (2) schools are too large as administrative units; (3) all pupils cannot assemble at one time
High school annexes are undesirable temporary expedients and increase congestion in main building
In the 21 annexes, including usually work of two terms, teaching "likely to be inferior"; teachers change often and do a relatively larger amount of teaching than teachers in main
building; equipment usually not as good; supervision not as effective; classes larger; conditions generally militate against successful work
Small rooms, never intended for classroom purposes, are being used in high schools which means expensive instruction
Large rooms and consequently large sections due to congested conditions often mean ineffective instruction
False economy to force the use of inadequate classrooms by not providing classrooms of the proper size
In many schools not enough teachers to maintain standard size of section and standard week's work for a teacher

## Wrong Method Used in Estimating Teachers Needed in High School

> Fact base: Board of education blank used in 1911 ; figures given by principals, 1911 ; annual report of city superintendent: Ballou report

Method used to appoint teachers is inadequate as based on average number of pupils per teacher in school as a whole and on average number of pupils per teacher by departments in a school
Blank unsatisfactory, lacks continuity and coherence. No data covering size of section, amount of work in each subject or amount of work teachers are doing
Data given covers only three year period, insufficient to avoid using temporary or exceptional conditions as a base
"Average number of pupils per teacher" is an unnecessary and misleading basis because such averages (1) mean nothing in system of general and special schools with from 200 to 4,000 pupils; (2) vary from term to term ; (3) are based on gross register which includes many pupils (sometimes 400) who never attended school, and many assistants, library and clerical, who do no teaching
Dates in various tables do not correspond

## High School Course of Study "Unwisely and Unjustly Inflexible"

Fact base: New York course of study issued in 1908; actual programs; courses of study from other cities: Davis report: 76 pages
Excessive minformity of course of study constitutes most serious defect and gravest weakness of administration of program of studies
Courses and schools do not satisfactorily meet needs of either those who have decided on future careers or those who have not

General course particularly weak in industrial work; no courses whatever for boys, and only single elective course in cooking for girls
Compared to courses of study of ten representative cities, Boston, Chicago, Cincinnati, Milwaukee, Cleveland, Detroit, Indianapolis, Los Angeles, Newark and St. Louis, New York's general course varies as follows:

1-Scope is decidedly narrow, especially in newer and more practical subjects and differentiated courses in older, conventional subjects
2- Some of the subjects provided in other cities and not offered in New York are: debating, dramatics, commerce and industrial history, economic geography. astronomy, geology, minerology, analytical geometry. calculus, natural history, history of music, musical composition and harmony, history of art and architecture, psychology, ethics, home sanitation and nursing, household management, laundry, dietetics, metal working, pottery making and military drill
3-Offering in New York is pursued with less intensiveness than is the offering clsewhere in respect to English, history, civics, economics, mathematics, natural science, commercial subjects, industrial subjects and music
4-Course in New York is more rigidly administered than in other ten cities, measured by the $70 \%$ prescribed work of total amount required for graduation; i.e., general course administered with less regard to special interests and aptitudes of students than in any city save St. Louis
5-No other city prescribes entire course for first year students
Three years' prescription of a foreign language and two years' prescription in mathematics for every pupil seeking to graduate from the general course in New York City are indefensible
As actually administered, the general course is decidedly more narrow than printed annonncements indicate
Opportunities for pupils to elect work that is adapted to their special needs are restricted to an amount considerably less than small maximum which printed course of study sets forth
Compared to provision for special or technical courses in the same ten cities, New York's special courses are seen to be far from abreast of the times, and inadequate to meet demand of complex business and social interest
High school principals assert that long distances between high schools impose a prohibitive expense of time and money on many pupils

## Commercial Courses Ineffective

> Fact base: Analysis of commercial courses, teaching assignments, etc, in 13 high schools, elective courses in 11 general high schools and two exclusive special high schools; visits, conferences with principals: Thompson report: 44 pages

Open question whether or not general school is not giving at present more appropriate training for the major business needs
Loss of membership from commercial courses is from 5 to $10 \%$ higher than for high schools as a whole
Reasons given by principals are "attractive openings before course is finished"; "many elect commercial courses who do not expect to remain long," etc
Number graduating in 1911 shows two girls for every boy
Usual testimony of principals of general high schools is that commercial pupils constitute less desirable element of the school ; because commercial education does not offer opportunities in energizing occupations; social prejudice against applied education
No carefully organized effort to give vocational guidance in clementary schools so that pupils may select course most suited
Of 96 teachers in the Commercial High School, 78 came from lists designed to furnish teachers for academic high schools; 18 are so-called commercial teachers
No provision to secure teachers of commercial English, commercial modern languages, economics or business organization
Not surprising to find in special schools a considerable number of teachers who have no other sympathies and use no other methods except those of an academic high school
Teaching assignments of commercial teachers show proportimately larger number of teaching periods than the average for other courses
Standardizing by regents' examinations tends to produce a certain degree of uniformity in subject matter and achievement and to perpetuate standards which are "artificial, not real"
Natural inclination of teachers is to disregard real test in business world and emphasize regents' tests
Commercial students get but little related academic work
Practice of having commercial museum has hardly begun
In the main, in all schools, facility in business (clerical) technique is the major aim
Evidence of business world is against assumption that clerical training is the main objective of commercial education since of 5 largest commercial houses in New York answering questions about desirable preparation for employees, 9 to 1
chose "fundamental principles of business" over clerical arts
Of 65,617 boys and 65,191 girls from 14 to 16 years tabulated by the permanent census board there were as stenographers 586 boys and 3,244 girls; as bookkeepers 824 boys and 1,364 girls; i. e., preponderance of girls in clerical positions
Studies of business organizations made by the New York and Boston Chambers of Commerce show that (1) only 13 to $15 \%$ of employees are engaged in clerical work; and that (2) transfer from clerical department to other departments is unusual
In Commercial High School, course of study includes subjects not justified for any reason as requirements; such as music, drawing, geometry
No evidence that stenography should be a requirement for boys in commercial high school
Course of study is too choppy; too many subjects and too few periods are assigned to each subject
New York City's commercial courses are academic rather than vocational; i. e., general subjects are in most cases not related to the vocation; specific vocational subjects cover only a part of the vocation and the lesser part at that
Misconception of aim of commercial education is not confined to New York but is country-wide
In evening schools, commercial work is almost wholly clerical and without most of the liberal features found in the day school course

## Trade Training Inadequate

## Fact base: Visits to Manhattan Trade, Boys' Trade and Parental Schools; reports of superintendent; curriculum: Schneider report: 56 pages

Considering small per cent reached by these schools, problem of industrial education is in fact not being met at all
Majority of children who are of an age to acquire industrial training are not in school
Average daily attendance shows:
Boys' Vocational School............................. . . 266
Girls' Vocational School............................... 360
All elementary schools . . . . . . . . . . . . . . . . . . . . . . . . . . 586,673
All high schools . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 30,252
All night elementary schools ........................ 27.725
All night high schools . . . . . . . . . . . . . . . . . . . . . . . . 9, 9, 343
Problem is probably more vital, more complex and more pressing in New York than in any other city
Number in Boys' School, 266, "almost negligible in the sum total of boys who go to work before 16"; 35,478 working certificates granted during first 10 months of 1911

Present system of night and trade schools is too restricted and does not meet the needs of future and present workers
Too much stress is placed upon manual skill in one particular trade or one particular branch of a trade
Day high schools with full manual training courses do not pretend to be industrial schools
Ability of trade schools for energizing occupations to turn out skilled worker has been seriously questioned
New York lacks system of trade education accompanying gainful employment as demonstrated (1) at Fitchburg by four years coordinated half time work where average student can acquire an energizing trade and do nearly as much school work as that required by high school, in drafting rooms, chemical shops and laboratories, machine and pattern shops, building trades, boiler shops, outdoor work of railroads, track, signal bridges; (2) by various cooperative plans (Fitchburg, Mass., Solvay, N. Y., Lewis Institute, Chicago) where course is found commercially profitable to manufacturer and student and economical to school; (3) by experience of four years here also, showing that no confusion or inconvenience caused to shop organization ; (4) by continuation schools in Cincinnati which have proved that worker in energizing trades who goes to school one half day a week (on pay) is a better producer per week than if he does not go; (3) by cooperative courses for department store employees from 8 to 10 o'clock and in the evenings at the stores to teach psychology of salesmanship and give fairly expert knowledge of things they are selling

## Night Schools Not Fit for Enervated Worker Fact base: Report of district superintendent in charge, and visits to classes [number not told]: Schneider report

"The classes visited, which exist because of the compulsory law, inspired no feeling but pity for the children; some of the pupils were aslecp, and all but a few of them looked fagged out"
In 1910,338 pupils attended night high school every evening (120 evenings) ; 15,640 attended less than 60 evenings ; 2,234 pupils attended elementary night school every evening (90) ; 33,303 attended less than 60 evenings but more than one week and 11,937 attended one week or less
Standardization of courses without an analysis of daily work of students had had much to do with the losses and small attendance
It is not obvious that charging a fee for night school delinquents would have any good effect
In trade subjects taught in evening trade schools, tendency is to provide for energized workers only, neglecting the very important problem of the enervated workers

## Method of Running Buildings Extravagant and Inefficient

> Fact base: Study of heating, ventilation, power, fire protection, clerical work, designing, lighting, plumbing, cleaning, use of buildings, care of apparatus, supervision, operation in 49 elementary and two high schools: Armstrong report: 68 pages

Boiler plants are not concentrated even in the same building Some schools have as high as six separate plants in use
Extremely wasteful condition in almost all of the schools in oldest form of coal burning appliances, "natural draft," which causes loss of more than two-thirds of heat liberated
Proportionate amount of grate surface is too large, consuming only 3 lbs . of coal per sq. ft. instead of an accepted standard of 17 to 22 pounds per sq. ft. per hour
Present drinking arrangements are unsuitable and unsanitary Oil used costs twice as much as oil used by other departments No uniformity as to temperature for hot water
Hot water tank in one building exploded
In many schools windows so loosely fitted that much heat is lost and drafts prevail
Heating systems in general are poorly designed
Separate return lines to basement from each radiator are wasteful and expensive
Present systems of ventilation are in most instances so faulty and antiquated as to be a direct menace to pupils and teachers
In only one building visited by us are modern methods in use Systems used are forcing dirty air into classrooms, and lack proper humidfying apparatus
Present methods of cleaning are antiquated and unhygienic
Impossible by present sweeping methods to remove dirt and dust from floors, walls, ceilings and their crevices
Public school buildings are conspicuous by lack of fire protection
None conform to fire regulations
Enclosed stairways are merely exits, not fire preventions
Fireproof buildings are made entirely unsafe by quantities of inflammable material inside
Extravagance of $\$ 95,000$ a year for electricity because contracted and paid for by another department
Schools very much over-inspected
Confusion of authority and lack of coordination between different divisions of department of inspection
Standard for buildings does not meet requirements for fireproofing or ventilation
Method of issuing "book of rules" for janitors is not efficient as each plant differs
Seating capacity of schools is by no means utilized to its fullest extent

Scating capacity is fully adequate to provide proper and adequate accommodations for all children of school age without crowding or erection of single additional building at this time, if properly used

## Unnecessary Loss of Time and Money in Building Fact base: Study of construction of 20 public schools from selection of site to completion; records and correspondence of board of education, board of estimate, architectural department, finance department, etc: Armstrong report: 131 pages

Schools have required in some cases eight to ten years for completion after needs became apparent, during which time the pupils would have outgrown their school days
Selection of sites not founded on scientific basis; location of site is determined by local request and speculation rather than by scientific census calculation assisted by local surveys
Review of plans by city departments entailed an average of four and a half months, time wholly chargeable to necessity of outside approval
Unnecessary loss of time on departmental approval of work not pertaining to that department, and in useless formalities between departments due to requirements of each department
Time is lost in design, in approval of contract and in construction because the general construction, heating, ventilating. plumbing, drainage. electrical and furniture plans and specifications are submitted to various city departments separately through long intervals of time instead of simultaneously
Much time and financial loss is occasioned by too frequent use of new designs for school buildings
Delays and loss of efficiency because of unscientific mechanical designs
Best grade of work not secured and financial loss results from apparent necessity of selecting the lowest bidder. practically regardless of experience or integrity
Extra building construction, expense and delays are caused by lack of economy in use of present buildings
Public school buildings require from 50 to $400 \%$ more time for construction than buildings presenting equal natural difficulties but privately owned and constructed
Procedure for site selection and acquisition is complicated through reference of request by local school board, district superintendent, principals, citizens, to board of education's committees on sites and buildings, city and associate superintendents, permanent census board, committee on finance; to board of estimate's budget committee and the board itself: to board of aldermen, their committee on finance, and finally back to the board of echucation

Fact that there are approximately 90,000 pupils on part time is due in a large measure to erroneous method of locating sites
Board of education has been careless in conserving city funds and exhibited lamentable lack of foresight in engineering matters
Average cost of school buildings per cubic foot is 23 cents in New York, 14 cents in Chicago, 14 cents in Cleveland. This shows comparatively high expenditure for schools under present system of designt
Waste places suitable for instruction are unused

## Serious Degree of Overheating in Some Schools Fact base: Careful physical, chemical and bacteriological air study of 10 typical schools from Dec. 2, 1912, to March 15, 1913; subsequent examination of 22 other schools (out of 500 schools); 4 different night schools visited: Baskerville-Winslow report: 200 pages

Orerheating and unsatisfactory ventilation due fundamentally to absence of skilled and careful operation
Atmospheric conditions in night schools found unsatisfactory as to overheating and air stagnation
Conditions aggravated in some instances by burning of gas light
Relative humidity is low: ranges between 25 and $50 \%$ of saturation and rises above $50 \%$ in only $10 \%$ of records.
Certain schools show distinctly bad results indicating insufficient air supply
Certain schools show extravagant variations of temperature with gross overheating
In one-sixth of rooms studied distinctly bad conditions found in temperature due to careless operation by janitors or interference with janitors by teachers

## RECOMMENDATIONS CLEARLY REQUIRING ADDITIONAL MONEY

As to Continuous Investigation (Elliott)
Establish a burean of investigation and appraisal as an integral part of the system to serve as the central agency for gathering and interpreting statistical data, and for making such investigations as are necessary
As to Superintendents (Elliott)
Establish a supervisory council including city superintendent, all district superintendents, selected directors, principals of elementary, high and training schools, representatives of teachers in different grades and schools; to possess general powers of initiation and direction of all matters relating to aims, means and method of instruction
As to Special Branches (Elliott)
Appoint additional assistant directors of kindergartens
As to Discipline (McMurry)
Organize in certain schools, special classes for persistently troublesome children in which corporal punishment under careful restrictions will be allowed
Increase the number of parental and disciplinary schools
As to Supervision by Principals (McMurry)
Assign clerical and routine dutics to minor officials so that principal has little responsibility in regard to them
As to Non-Promotion (Bachman)
Distribute poster in several languages emphasizing importance of beginning school on time
Provide "C" classes for all pupils, at least in 1A grade, unable to use English language
As to Ungraded Classes for Feeble-Minded (Goddard)
Enlarge radically work of ungraded classes
Greatly increase expenditures
Equip classes promptly and adequately
Appoint separate superintendent of schools for feeble-minded, four additional associate inspectors; five examiners, psychologists and physicians, to discover and classify defective children
Segregate ungraded classes in special schools as fast as possible, free from rules and regulations of regular schools
Establish as rapidly as possible the right kind of training schools for teachers of defectives
Sulsstantially increase bonus now paid to teachers of defectives
Appoint a number of special assistants to follow up history of defective, feeble-minded and crippled children after they leave special and ungraded classes

Test all repeaters and overage pupils in special classes by Binet-Simon scale in hands of experts

As to High School Organization and Administration (Ballou) Employ enough teachers to keep sections reasonably within standard of 28 to 35 pupils
Relieve chairmen as far as possible from all purcly clerical work
Furnish each principal with a sufficient number of competent clerks to perform the clerical work
Erect no high school to accommodate more than 1500 students, the satisfactory size, educationally and economically
Establish types of specialized high schools throughout the city as a basis for studying their effectiveness
Build high schools to take the place of annexes in various parts of the city
Limit seating capacity of classrooms to maximum standard size of section

## As to High School Course of Study (Davis)

Introduce manual training for boys into first and second years of general curriculum of every school, one year prescribed for graduation
Make two years' offering in all general high schools of domestic science and applied art for girls, one year required for graduation
Add other general courses: introductory social science (municipal activities, civic and vocational guidance); fine arts, additional courses in commercial work, English, science and music; specialized and general "appreciation" courses in science, mathematics, history and English whenever interests of pupils make them desirable
Make special courses more available by incorporating (1) additional special or technical courses parallel to the general course in the general high schools; (2) elementary courses in semi-technical work as electives in the general course
Issue a New York City high school diploma as well as the regents' high school diploma
Give serious consideration to possible plan of defraying expenses of transportation of those pupils who are beyond walking distance or cannot afford car fare

As to Commercial Education (Thompson)
Begin at once cooperative plans between commercial schools and business houses
Appoint temporary special commission of commercial teachers and business experts to examine business conditions in relation to commercial education

Appoint a supervisor of commercial work for all grades
Segregate sexes for purposes of effective commercial education and differentiate training according to aptitudes of each
Appoint special teachers, "coordinators," as field agents for commercial schools
As to Trade Training (Schneider)
Broaden curricula of present vocational schools to embrace a larger number of types of occupation
Establish (for children who must or want to work or are tired of school) more prevocational schools like Parental School, with most energizing and diversified types of work possible
Inaugurate to a limited extent cooperative system of education accompanying gainful employment whose elements shall be

1-Combination of manual work in commercial shops with school work, usually equal parts of each, alternating
2-Agrecment between group of manufacturers and schnol system
3-School course devised by school authorities
--Apprentice courses in shops approved by school aththorities
5--Apprentices paid for their work
6-Coordinators to link work of shop with school instruction
7 -Duration of course determined by time required for thorough apprenticeship plus necessary coordinated schooling
S-Trial of two months to be sure candidate likes the trade
Establish (for children forced to go to work when law permits) day continuation schools for all trades, with underlying science for highly energizing trades, and lively, interesting courses for more enervating trades, "brilliant and healthful pleasure courses"
Study carefully occupations into which children go in order to "wiscly devise" continuation courses
Enlarge the Parental School so that children sent there may remain longer than seven months
Make enmprehensive survey showing (1) number of boys and girls in different occupations; (2) whether work is energizing, enervating, juvenile only, seasonal (3) vocational statistics on wages, home conditions, reasons for leaving schonl, etc

## As to Handling of Correspondence (Averill)

Establich a central bureau of information at the hall of the board of education

As to Construction and Care of Buildings (Armstrong)
Centralize wherever possible the separate steam plants in one building or in adjacent buildings
Install automatic elevators in all schools having more than three stories
Install suitable number of pedal operating drinking fountains at earliest possible moment
Install mixing valves to regulate hot water temperature with $115^{\circ}$ as maximum
Tighten windows where necessary
Install good, economical and modern system of vacuum heating
Extend temperature control system to all schools heated by steam
Employ modern sanitary vacuum cleaning process
Provide all schools immediately with automatic sprinklers, standpipes, fire pumps and automatic alarms
Replace all wooden stairways with steel
Install sanitary and fireproof furniture
Employ competent instructors to teach janitors how to get best service out of their plants

## RECOMMENDATIONS INTENDED TO SAVE MONEY

As to Special Branches (Elliott)
Eliminate special teachers in certain subjects (music, drawing, physical training) by requiring competency on part of regular teachers
As to Elementary Course of Study (McMurry)
Omit the teaching of (1) considerable part of arithmetic course, (2) technical grammar and English history as separate subjects
As to Non-Promotion (Bachman)
Consider seriously whether, if segregated into classes of standard size with adapted course of study, many overage children cannot be provided for without incurring increase of $50 \%$ for special "E" classes
As to Intermediate Schools (Bachman)
Establish intermediate schools wherever conditions are favorable if present findings are substantiated by further investigation
As to Ungraded Classes for the Feeble-Minded (Goddard)
Use institutions for feeble-minded as model schools for teachers taking training in this line of work
As to High School Organization and Administration (Ballou)
Study program making by principals to reduce number of unnecessary oversized and undersized classes

Erect specialized type with single curriculum as more effective and economical for New lork City
Provide study halls to accommodate 125 or 150 pupils and thus economize on time of supervising
As to Trade Training (Schneider)
Abolish elementary night schools now in operation under compulsory education law

As to Handling of Correspondence (Averill)
Institute a system of blank forms to eliminate or diminish much of the work now done by stenographers and typewriter copyists
Remore the so-called "city superintendent's file" to a central room, thereloy dispensing with the many individual files that now duplicate clerical work and entail the misplacement of documents
As to Construction and Care of Buildings (Armstrong)
Instaii controlled draft system and proper grate bars to prevent loss of heat, and burn smaller coal
Reduce proportionate amount of grate surface
Install recording instruments and weighing apparatus
Have engineers keep accurate records of weight of coal and ashes, steam and electric production and consumption, duplicates sent periodically to school board
Purchase oil under proper specification, thus saving $50 \%$
Change large per cent. of coal to buckwheat No. 3 and save $\$ 205.000$ annually by installing apparatus costing from $\$ 2=00$ to $\$ 3000$ per school building
Take advantage of wholesale rates to reduce light and power bill \$95.470.41 a year
Install simple form of isolated plant if sufficiently low price cannot be obtained from Edison Co.
Reduce inspection force $60 \%$ with pro rata increase of efficiency
Janitor-engineer should be competent to report all repairs he cannot himself remedy
Save annually $\$ 630,922.41$ by
Changes in lieating plants. . . . . . . . . . . . . . . . . $\$ 350.000 .00$
Renrganized inspection ....................... 142.527 .00
ITholesale electricity . . . . . . . . . . . . . . . . . . . . . . $95,470.41$
Use of modern lamps. . . . . . . . . . . . . . . . . . . . . $42,925.00$

## RECOMMENDATIONS PER SE NEITHER ADDING NOR SAVING MONEY

As to Examiners (Filiott)
Arrange service on board so as to permit each member to devote every fourth year to supervisory or other special duty in the school system

Take steps to secure the reading and rating of written examinations by persons not immediately connected with school system

## As to Method of Rating (Elliott)

Require reports on teachers applying for renewal of license to furnish detailed, positive evidence in support of renewal, including reports by principals showing number and duration of visits to classes, variety of work inspected
Base approval of first year service entircly on principal's report ; base second renewal on careful cxamination by district superintendent; final renewal on inspection by independent visitor; eliminate recommendation of division superintendent

## As to Superintendents (Elliott)

Secure wider responsibility and participation of members of teaching and supervisory staff in making and overseeing educational policies

As to District Superintendents (Elliott)
Transfer many of their supervisory responsibilities to principals of schools
Provide for their larger participation in the making of educational policies

## As to Special Branches (Elliott)

Make clementary school principals responsible for supervision of kindergartens to same degree as for other classes
As to Principals (Elliott)
Place a premium on supervisory capacity by providing freedom of action to every principal in accordance with his competency, in order to increase number of (a) those competent to act as supervisors and to make a conscious effort to subordinate routine ; in contrast to (b) those content to confine their activities to mechanics of school operation
As to Elementary Teachers (McMurry)
Fix authority of class room teacher more definitely
Print well defined plan guaranteeing freedom to teachers
Discover reasons and remedy for present dissatisfaction among teachers
As to Discipline (McMurry)
Simplify mode of commitment to parental and disciplinary schools

## As to Elementary Course of Study (McMurry)

Rearrange whole curriculum to establish fuller correlation among studies

Include in syllabi statements of working aims and principles of instruction, and establish impossibility of one fixed and best method of teaching details
Vary curriculum for particular children to whom it is to be taught
Plan through principal and teachers a curriculum for each type of enviromment. to be adopted or modified by principals and teachers in neighboring schools

As to Spelling (McMurry)
See that teachers make grade lists of words in "active vocabulary" of pupils, class lists and personal lists

As to Arithmetic (McMurry)
Emphasize fundamentals during first six years, then their application in connection with other subjects

As to Music (McMurry)
List appropriate classic selections for grades and school as whole: subordinate technical knowledge to school singing: pay much more attention to individual attaimment instead of concert work; outline more definite requirements for each grade as to application and scholarship; take more care in choice of selections; establish good standards of taste

## As to Nature Study (McMIurry)

Reorganize course completely; select subject matter with reference primarily to pupils' interest ; group studies to bring out human interest in larger problems; suggest regular nature study for grade 6; make required work very small, leaving most to selection of teachers

## As to Reading (McMurry)

Place greater emphasis on silent reading in literature
As to Supervision by Principals (McMurry)
Classify principals' duties so that definite understanding is reached that principal shall identify himself primarily with duties requiring the technical ability of the educational specialist
Make principals responsible for developing a theory of supervision which shall be revealed to teachers by the effective manner in which they are aided through its means, and to superior school officers by reports on this subject
Make principals the real, not merely the nominal heads of their schools
Judge teachers' ability to instruct in terms, not of what the teacher does but of what the child does
Reduce frequency with which teachers are rated

Let principals and teachers take initiative in making curriculum in all subjects for their school
So discuss methods in syllabi that in no way will principals' hands be tied
Establish definite avenue of approach to superior officers so that recommendations that express the consensus of opinion of principals when forwarded to these officers shall command careful consideration and full reply within reasonable time

As to Age-grade Reports (Bachman)
Change age-grade reports to insure (a) facts by each of 16 grades; (b) one report at the beginning of the school year and another at the end; (c) consideration of total register including graduates and those dropping out and children in special "E" and "C" classes; (d) use of up-to- $141 / 2$ as "normal" for finishing $8 B$; (e) ages and grades of same day (i. e., ages on date of closing of official school term, grade in which children have been during same term)
Take ages on first day of school term to show age-grade condition in each class as based on normal age limit for entering each of 16 grades; (i. e., 6 to $61 / 2$ years for 1 A , $6 \pm / 2$ to 7 for 1 B , etc)
Make parents go on record in getting date of birth, year, month, day
Compute child's age at beginning or end of official school term in terms of years, months and days (30 days to a month)
Report separately, with ages, children in classes for blind, deaf, cripples, mental defectives, anæmic, etc

As to Non-Promotion (Bachman)
Enforce compulsory educational law in 1A grade, to avoid trouble with parents and "cure many an incipient case of truancy"
Amend by-laws so as (1) to prohibit entrance to 1 A grade after last day of fourth week of school term to children who will not be seven until after the end of the term; and (2) to exclude children who miss 40 days during the first half of term
Have census board send to each principal at beginning of each term the home addresses of children who (1) will be seven before end of that term; (2) will not be seven until after its close; (3) are seven and should enter school
Require new attendance report for 1 A grade to show cause of each absence, and scparate reports for children not amenable to compulsory education law
Investigate each child now in "E" classes to determine to what overage is due

Provide classes in which special attention is given to all pupils two or more years behind their grade
Make course of study so flexible that additional time may be devoted in regular classes to aiding children to acquire working knowledge of English
Insist that principals establish wherever necessary and possible the Ettinger part time plan as superior in rate of promotion and hours of instruction to other part time plans
Collect by terms, from current and cumulative records, data relative to promotions, non-promotions and part time (suggested blank given)
Investigate relative merits of whole and part time classes
Make actual total length of each elementary school course correspond with period between 6 and it years of age and with length of time pupils may reasonably be expected to be in attendance during this period
Discontinue practice of holding pupils in elementary schools long after they are 14
Collect and tabilate, term by term, reports from several schools on pupils leaving and reasons therefor
Consider $100 \%$ the desirable uniform rate of promotion in each grade in each school
For extra-bright children who are able to do more than maximum requirements, make course more difficult by raising requirements
Adapt requirements to varying abilities and educational needs of different groups (1) so that all normal children in regular attendance will be able by 14 to complete the elementary school course, and (2) so there will be as many different courses of study as there are groups of chiddren having different abilities and educational needs
Revise actual total length of each of these different courses and the requirements of each in view of above data to be collected by terms

As to Intermediate Schools (Bachman)
Take special care to maintain sympathetic relations between intermediate schools, contributing schools, and high or vocational schools, thus developing systematic vocational guidance
Use complete records of work and cost of such schools to improve them and judge their efficiency
As to Estimating Teachers Needed in Elementary Schools (ljachman)
Make entire system (not individual school or district) the unit in estimating the total register for which provisions are requested, because more exact, simpler to make and includes all data needed

Exclude from register used all pupils transferred to other schools and include only pupils who have been in school at least one entire day during a given month
Base estimated register on the actual average annual increase for a scries of years ranging from one to five
Estimate for each month of the school year the total register of the system as a whole, since the total register of each elementary school changes from month to month
Distribute the total estimated register among the different grades on the basis of the average annual increase or decrease in the register of each grade for a series of years
Make each individual school the unit in determining the number of pupils for whom one teacher should be provided, studying by months and grades the number and size of classes in each school
Expand and define regulations of board of education concerning (a) standard size of class in each grade; (b) combination of small classes; (c) division of large classes

## As to Compulsory Attendance (Burks)

Reorganize the compulsory attendance staff according to kinds of work; i.e., (a) preliminary investigation and report; (b) preventive treatment; (c) disciplinary treatment (d) corrective (institutional) treatment

## Division of Enumeration and Investigation

Should maintain complete census of all children of school age; make preliminary investigation of all referred cases; list children as moved or not found; and account for all cases before they are finally dropped from record of cases under consideration

## Division of Prevention and Probation

Should make further investigations to ascertain facts regarding physical, mental and social conditions affecting each case; diagnose and ontline treatment; obtain cooperation of teachers, physicians, parents, charitable societies, etc; confer with parents and teachers in cases of irregular attendance; act as probation officers for children placed on probation by district superintendent, conrts and truant schools

## Division of Discipline and Prosecution

Shonld prepare cases against children or parents, cooperate with police department in enforcing newsboy law, etc

## Division of Correction

Should include institutions for temporary detention or permanent care of children, a day detention school in each district and parental schools for habitual truants

Reorganize reporting forms and classification of data in detail [suggested blanks given] to include (a) daily time and service report for officers; (b) montlly summary of time and service reports; (c) report on investigation of pupils' absence: (d) cumulative record of each case investigated: (e) daily summary record for each school; (f) monthly summary by districts (or by individual attendance officers)

As to Tests in Arithmetic (Courtis)
Undertake systematic experimental work in measuring factors making for efficiency
Study relation between race, nationality and social conditions of children and their scores and growth in standard tests
Study social life of all types of chiddren to determine material available for problem work
Study relations between physical and mental growth, as measured by standard tests
Study individual children going to work to determine needs of different classes of children
Determine by experiment best method of developing speed and accuracy, and whether oral drill or written drill is more important
Adjust drill on hasis of measured needs of each individual child
Use comparative graphs as practical classroom device for keeping track of children's needs

As to Ungraded Classes for the Feeble-Minded (Goddard)
Place as many children as possible in an institution or colony for permanent segregation
Make appropriate manual training (such as can be seen at the Institution for Feeble-Minded, Waverly, Mass.) the principal work in all these classes
Ascertain actual number of feeble-minded children who are crippled, blind or deaf and have been shut out of school

As to High School Organization and Administration (Ballou)
Adopt 30 pupils provisionally as the standard size of a recitation section
Allow chairman as well as teachers one free period each day
Have chairmen of departments spend at least two periods per month in the class room of each teacher
Decrease number of teaching periods when chairman are assigned administrative duties
Have principals and superintendents differentiate definitely between what is clerical and what is administrative work
Allow principal of 1,000 pupils 15 periods of time from his teaching staff for necessary administrative functions;
principal of 2,000 pupils 30 periods; of 4,000 pupils 50 periods
Subject courses of study to continual revision by committees of high school principals and teachers and board of superintendents
Use regular knowledge possessed by principals and teachers in all general administrative matters affecting internal organization
Expect and require principals and teachers to contribute results of their experience
Base cvery act of controlling administrative agency on knowledge which comes from direct contact with schools
To determine need of additional teachers use blank which calls for essential facts concerning (1) size of sections and (2) amount of teaching
As to High School Course of Study (Davis)
Encourage principals and teachers to make thorough analyses of needs and desires of the communities in which their schools are located and of dominant interests and real needs of the pupils that enter their schools
Give greater intensiveness and continuity to instruction
Reduce uniform prescriptions for graduation not to exceed $55 \%$ of requirements for graduation
Encourage individual election of studies to minimum amount of $45 \%$ of required work
Prescribe for all students only courses in English, social sciences, natural science including physiology and hygiene, physical training, manual training for boys and domestic science and art for girls, ethics, music and drawing
Print subcourses centering in some major subject and circulate them among pupils as suggested guides
Require each pupil to take, before graduation, at least three years of work in some department other than English
Omit foreign languages and mathematics in absolute prescription for graduation, but permit alternative choice of these two, or on advice by the principal, prescribe neither
Adapt special high schools to varions needs of pupils (1) by differentiating subject matter of included academic sulbjects so as to give them a decidedly technical bent, (2) by permitting individual specialization in third and fourth years, (3) by encouraging organization of special courses to meet needs of pupils whose stay in school must be short

As to Estimating Teachers Needed in the High Schools (Ballou)
Adopt new blank [facsimile given] which gives information on (1) net register, number of pupils and teachers for each subject by terms for period of five years ; (2) analysis
of organization of school for the year, size and number of recitation sections, total teaching and study hall periods per week for each teacher, number of clerical and laboratory assistants: (3) estimate of the number of additional teachers and assistants needed
Revise the blank from time to time in accordance with suggestions made by principals
Invite representative high school principals to be present at all conferences of school anthorities and board of estimate concerning high school estimates

## As to Commercial Education (Thompson)

Appoint council of chairmen of commercial departments to study, weigh and recommend improvements in courses and methods
Establish course of study with subjects of merchandise and salesmanship as a vocational group in connection with Washington Irving High School
Segregate commercial pupils in general high schools into a commercial department
Abandon regents tests for commercial subjects
Make separate eligible lists for all teachers giving instruction in commercial schools and courses
Establish one year and two year courses with specific objec. tives for those who cannot stay longer
Include in commercial school course assembly talks by business men

As to Trade Training (Sclmeider)
Inaugurate a system of advisory boards of representatives of employers and employees to help bring school and shop into cooperation
Open every school gymmasium every might under the direction of physical directors

As to Handling of Correspondence (Averill)
Secure a supply of pronted forms giving information in answer to questions which experience has shown to be recurrent, and blank forms which can be filled out in answer to various requests
Detail a clerk to attend to queries involving the compilation of special data
Establish a system for the complete recording of business which is transacted verbally, thereby making records complete and fixing responsibility for what is now relegated to memory
Detail an office organizer to reorganize and coordinate the correspondence work not only of the superintendents' offices but also of the other offices wherever necessary, grading work so that supervisory officers drawing salaries
of from $\$ 3,000$ to $\$ 10,000$ shall not be engaged in clerical work which can be done by clerks drawing $\$ 900$ to $\$ 2,000$ annually
Enable ligher supervisory officers to give to educational supervisory work time now given needlessly to clerical work and unnecessary questions

As to Delays in Construction of Buildings (Armstrong)
Select sites for new schools upon data obtained from accurate census calculations and local surveys
Utilize permanent census board records to determine present and prospective school population and future transportation facilities
Estimate seating requirements at least two years in advance
Have designed by board of education all plans of any one school in one unit, such as general construction, heating, ventilating and electrical plans
Complete partial standards of school buildings by board of education and evolve an absolute standard set of school building designs for elementary schools. The savings would amount to at least $10 \%$ of total cost of construction
Have standards of sufficient variety to conform to architectural requirements of locality
Have complete set of rules issued by each city department whose approval of plans is required, outlining requirements
Retain for the designing force of the board of education an engineer of as well established ability as its architect, to have full charge of mechanical design of school buildings, and maintenance
Make walls, floors and ceilings and all furniture in school buildings of washable material devoid of angles or unsanitary projections
Run the schools "all the year round" with four terms per year, use auditoriums constantly, etc
As to Construction and Care of Buildings (Armstrong)
Investigate coal storage at Parental School to avoid spontaneous combustion
Evolve perfect school design to reduce architectural and mechanical force now required
Separate architectural and engineering departments, and put supervision of janitors and purchase of engineering supplies under department of engineering
Give kindly, intelligent and personal instructions to janitors instead of a book of rules

As to Janitorial Compensation (Armstrong)
Consolidate work now carried on by committee on buildings and staff of committee on care of buildings

Decide definitely whether board wishes to continue or discontinue indirect employment of firemen and cleaners
Organize fixed staff of janitors and assistants for each school building
Fix definite compensation for period of six months, not to be increased unless additional rooms or buildings are added
Hare salaries and grades of janitorial positions fixed by board of estimate, and let board of education assume sole charge of promotion and transfer to grades thus established
As to Ventilation (Baskerville-TVinslow)
Operate fans in schools during night sessions
Make occasional study by visiting engineers in each school of temperature and volume of air at room inlets
Install thermograph in each school building: inspect records carefully as efficient control of rentilating systems and janitorial service

## RECOMMENDATIONS REQUIRING STATE LEGISLATION

As to Examiners (Elliott)
Reorganize board to have nine members including city superintendent, ex officio
As to Superintendents (Flliott)
Abolish board of superintendents and position of associate city superintendent
As to Non-Promotion (Bachman)
Amend compulsory education law to apply to children who will be seven before end of given school term instead of to children who are seven at beginning of a given term
As to Ungraded Classes for the Feeble-Minded (Goddard)
Amend child labor law so that defective children may go to work as soon as it is clear that it will be more profitable for them to work than to go to school
As to Trade Training (Schneider)
Enact a compulsory continuation school law requiring four hours a week in day time at employer's expense, if employers oppose continuation schools
As to Delays in Construction of Buildings (Armstrong)
Establish by changes in charter if necessary, a technical efficiency bureau, whose duties shall be to pass upon the mechanical and architectural adequacy of all building plans of all departments
Establish by law a board of censorship for contractors, to make public a list of contractors whose intelligence, experience, integrity and financial ability render them eligible for city work

## FURTHER INVESTIGATIONS SAID TO BE NECESSARY BY TEN SCHOOL INQUIRY INVESTIGATORS

## To Determine

Powers and duties in detail of city superintendent, board of superintendents and associate city superintendents, to secure more efficient distribution of administrative and supervisory powers (Elliott)
How elementary schools can continue the main lines of work begun in the kindergarten, while giving mastery over symbols (McMurry)
Main objects clementary instruction should aim to accomplish, in terms that are significant to teachers and laymen alike and that breathe a broad spirit (McMurry)
Advantages of intermediate schools based on data collected for a number of terms (Bachman)
Localities where conditions seem favorable to establishment of intermediate schools (Bachman)
Actual age-grade conditions in elementary schools (Bachman)
Causes of overage (Bachman)
Actual total length of present elementary course of study (Bachman)
Actual length of time children are in attendance between 6 and 14 years (Bachman)
Which groups of children have different abilitics and educational needs (Baclıman)
Best age of entrance to elementary schools (Bachman)
At what age children need a regime different from that of elementary school (Bachman)
Number of normal children entering and completing the present course of study (Bachman)
Relative educational achicvements of pupils in whole time and part time classes (Bachman)
Relative educational worth of classes of each of several sizes (Bachman)
Extent to which pupils now in "E" classes are classified and instructed according as their overage is due to late entrance or to retardation (Bachman)
To what extent $51 \%$ of those who left school during Janu-ary-June term, 1911, had legal reasons and to what extent their leaving was due to inefficiency of the department of compulsory education (Bachman)
Value of methods and results of all institutions to which children are now committed for custodial care (Burks)
Adequate supervision of children paroled and placed on probation (Burks)
Method of placing in school non-attendants found on the streets (Burks)

Value of hearings of cases by district superintendents (Burks)
Method of prosecution of parents and truant children (Burks)
Whether child labor, mercantile and newsboy laws are properly enforced (Burks)
Relation between the physical and mental growth, race, nationality and social condition of children and their scores and growths in standard arithmetic tests (Courtis)
Material available ior problem work by study of social life of all types of children (Courtis)
Best method of developing speed and accuracy in arithmetic (Courtis)
Relative progress of high school pupils in large and small sections in same term and same subject (Ballou)
Intellectual and plysical effect upon teachers of handling large and small sections in high schools (Ballou)
Whether high school teachers doing less than 20 periods of teaching a week are not doing too little teaching and too much other work (Ballou)
Whether those having more than 25 periods are not teaching too much (Ballou)
Relations of (1) number of curricula in one high school to size of sections and number of teachers; (2) number of electives to cost of instruction; (3) daily program to time allotments for subjects (Ballou)
Proper number of high school periods per week and which sulbjects should be taught (Davis)
Accessibility of present high school opportunities and high school needs not now provided for, in order that the different types of courses or schools may be located where reguired and within walking distance of the homes of pupils (Hanus)
Trend of population and its growth in density, block by block, shown clearly on a map (Armstrong)
Available sittings occupied and unoccupied, district by district (Armstrong)
Present results of commercial education : business conditions in relation to commercial education (Thompson)
Possibilities for cooperative relations between commercial courses and commercial houses (Thompson)
Number of girls and boys employed in different occupations; whether the work is energizing or enervating; whether it is juenile work only, or whether it offers good permanent cmployment; whether or not it is scasonal; together with the usual vocational statistics on wages, home conditions, reasons for leaving school, etc (Schneider)

THIRTY-FIVE SUBJECTS, NOT COVERED BY THE SCHOOL INQUIRY, SUGGESTED FOR INVESTIGATION BY TEACHERS, PRINCIPALS AND PARENTS THROUGH THE SCHOOL EDITOR OF THE "GLOBE"

Training schools for teachers
Over-worked teachers
Extra curriculum activities of teachers
Effect of attendance at college on teaching ability
Promotion examinations
Coaching for examinations
Visiting teachers and teachers' visiting
Teachers' organizations
Pension and retirement policy
English used by principals and teachers
Night schools
Vacation schools
Recreation centers
All-year school
Popular lectures
Open-air classes
Use of museums and parks for teaching
Social life, fraternities, etc
Relation of public to parochial and private schools
Physiological age
School nurse and medical inspection
Sanitation of buildings
Athletics-expense, value
Cheap meals, school lunches
Vocational guidance and needs
Adequateness of educational supplies
Educational value and effect of part time (except in relation to promotion)
Congestion
Moral training
Local school boards
Litigation-extent, success, necessity, avoidability
School records-adequacy, complexity
Text books-needless purchase, adequacy
School publicity
Decorations and atmosphere

## HOW THE INQUIRY STARTED

For years prior to 1910 differences within the board of education, between the board of education and its superintendents, between the board and the board of estimate and the public, prompted numerous suggestions that the schools be investigated, especially school finances
In May, 1909, the Bureau of Municipal Research in its What New York's Next Mayor Should Do, included two suggestions about schools: (1) make a thorough investigation of the public school system, its curriculum, its administration, its plans for the future, its relation to private and parochial schools, its provisions for children's health, and its principal needs; (2) work out and inaugurate a comprehensive plan for industrial training with provision for studying and for publishing the result of all plans tried
In October, 1910, during the discussion of school budget estimates, the school editor of the Globe published over and over again a demand for a thorough school investigation as the only means of settling differences which had arisen year aiter year about the correctness of school estimates and the soundness of school proposals for spending money At the request of the board of estimate, Henry Bruère, director of the Bureau, drafted a resolution authorizing a school inquiry which Comptroller Prendergast introduced (see page 4) ; $\$ 50,000$ was included for expenses which the aldermen cut out and the mayor failed to put back by his veto power; funds were made available by transfers; President Mitchel of the board of aldermen, Comptroller Prendergast, and President Miller of the borough of Brons, were appointed a committec by Mayor Gaynor ; the inquiry proposal was universally welcomed; assurance of cooperation was given by board of education; scores of constructive suggestions were made by teachers and principals through the school columns of the Globe, and many others by editorial writers
Resolutions calling for the school inquiry and for two other departmental inquiries were distributed throughout the country by the Bureau as Efficient Citizenship No. 401
Upon request of the inquiry committee the Bureau outlined a tentative plan which it submitted to several leading educators for criticism and suggestion; wrote to scores of school men inviting suggestions; arranged luncheon and dinner mectings for considering plans and investigators
Scholia Club, Columbia University, invited President Mitchel and Director Allen of the Burcau to explain the purpose and method of the inquiry; among those present were Professors McMurry, Munro, Strayer, Suzzallo of Teachers' College, and B. C. Lewis, Luther T. Gulick, Leonard P. Ayres, Supt. A. B. Poland, Jesse D. Burks, etc

Study of business aspects of schools began to include accounting methods, handling of complaints and correspondence, supplies, sites, buildings, etc; W. A. Averill of the Bureau staff, loaned without cost for the study of office methods, handling of correspondence, etc; Director Bruère helped to supervise non-educational aspects
After conferences with President Pritchett, Dean Russell and several other educators, a list of proposed investigators was submitted by President Mitchel to Commissioner Snedden of Massachusetts for ranking; Professor Paul H. Hanus was chosen as director of educational aspects, no one else having been offered the post, and was given power to select collaborators; outline was agreed upon of facts the inquiry would have ready for making the 1912 school budget; suggestions were written by him for modifying the blank then before principals calling for facts on attendance, overage, non-promotion, etc; from facts furnished by Professor Hanus press notices were prepared by the Bureau as to his educational experience, similar notices being sent during the silmmer as new investigators were announced; at Prof. Hanus' request Bureau released Dr. Bachman whom it had engaged

## HOW THE INQUIRY WAS RECEIVED

Both morning and evening papers gave as much attention to successive individual reports as they could have given to the whole report if issued at one time. The school editors of the Globe and the Evening Sun quoted, commented and analyzed for weeks. In the latter Miss Louise E. Tucker, a school principal, challenged the investigators' findings under headings like: Bachman Suggestions in Report are Impracticable, Elliott's Suggestion to Abolish Board of Superintendents too Drastic, Hanus Experts' 'Inbreeding' Theory Unsupported by Fact, Omissions by School Inquiry, Muck Raking by Educators is Profitable, Hanus-Elliott Report Shown to be Wrong in Every Particular
In his series of articles on Investigating the Schools, Tristram W. Metcalfe, school editor of the Globe, emphasized the principal findings of each investigator, connecting these results with the experience of the schools during recent years and particularly with the efforts, successful and unsuccessful, of the School Progressives and outsiders to secure information or action in line with inquiry findings
Teachers and principals were first brought together for study of the inquiry reports by Mr. Metcalfe of the Globe; Jannary 24, 1913, a special council of teachers and principals organized to represent 24 different school organizations; February 5th, the city superintendent called meetings of
principals in each borough at the hour previously arranged for the above mentioned council to meet, to select members to cooperate with him in studying the reports; at the next meeting of the board of education, a resolution called upon these committees to report to the board as well as to the city superintendent; subcommittees began a study which continued for months but without published results, up to September
The city superintendent, February 1, 1913, requested principals to meet as above, through a circular in part as follows, published in newspapers:
"I ask the press and the public to suspend judgment on the report of Prof. Elliott and Prof. McMurry, and upon the reports yet to be submitted by other members of Prof. Hanus' committee who have been investigating the public schools
"I ask that the allegations, arguments and conclusions in these reports be not accepted as final until they lave been subjected to a rigid scrutiny by those who know our schools best-teachers, principals and superintendents"
The associate superintendents were the first to challenge publicly the inquiry findings; submitted April 23d to the board of education a 30 page Review and Reply of the Hanus-Elliott Report; its chief points digested on page 68
Meantime, unofficially, principals and teachers studied the reports and their own schools. In no other profession in New York probably, would such sweeping and scathingand often vulnerable-criticisms have been given a halfschool year's start and reiteration without challenge; it is a happy sign, however, that indiscriminate and irrelevant "T'aint so" argument seemed clearly out of place; thanks chiefly to the board of education's own publicly expressed attitude, teachers and principals fairly grabbed at the helpful suggestions; detailed analysis will begin in October
The district superintendents conducted some careful and general studies; tabulated facts which time sheets, working papers and reports should have shown as to time spent in classes and schools by investigators, schools and classes not visited, etc ; report forthcoming
The board of education twice appointed committees to review the reports, once in 1912 and again February 10, 1913, the latter to cooperate with teachers and principals; the former could do little because of the delay in issuing the reports: several of the reports were anticipated by special reports by board committees; the semi-annual report of President Churchill to the board of education made several references to the school inquiry indicating a disposition to utilize all findings and recommendations where found useable, but
noting the fact that before the inquiry reports came out regarding teaching, syllabus, etc, the board of education itself had called for revision of the curriculum; due in part to the inquiry, the board's attitude toward suggestion and criticism from whatever source is entirely changed; the division of reference and research started September, 1913, upon President Churchill's initiative is the board's best answer to the inquiry and a promise of continuing openmindedness, self-analysis and cooperation
Citizen organizations did less than occasion required; the Public Education Association opposed the 1913 legislation re schools as contrary to inquiry recommendations, joined in a public dinner to Professor Hanus, supported through two bulletins the rejected Moore report ; and in August, 1913, began the publication of digests and appraisals; 200 citizen agencies paid no official attention to the inquiry reports
The Bureau of Municipal Research was given a fund in October, 1912, with which 22 school inquiry follow-up bulletins were issued to 2,000 school superintendents, editors and others interested in education and to New York principals and commissioners; beginning December, 1912, numerous reports were published of a study made by its Training School for Public Service of P. S. 188 Boys, Manhattan, at the request of Principal Edward Mandel ; January 15, 1913, a card announced that the reports were to be published "next week" and told which papers would give full accounts; in July, 1913, a fund of $\$ 5,000$ was given for follow-up during the summer and fall; this fund is being used for this digest, other bulletins, the study of 1914 budget estimates, etc, to tide over until the Public Education Association organizes for the analysis, appraisal and follow-up which it hopes to guarantee

## THE ONLY REPLY BY INSIDERS TO OUTSIDERS, PUBLISHED YET,-RE ELLIOTT REPORT ON BOARD OF SUPERINTENDENTS

Report inconsistent and misleading; conclusions unjust and unfair, not sustained by anything more than general statements and anonymous criticism
Reviewed record of city superintendent since 1902 , but of board only since 1906 and ignored entirely minutes of board for six previous years
Many problems of school administration were overlooked by the investigator because discussion was not in minutes, though conference with members would have brought them to light
Whatever "conferences" held did not include members of board of superintendents, and investigator was present at only one meeting of board
Investigator ignored fact that from 1898-1902, borough superintendents established many features now boasted by schools, such as training school for teachers, three high schools, course of study, manual training, kindergarten, cooking, vacation schools, playgrounds, etc
Nio basis of fact for statement that board is "bureaucratic"; transference of duties to city superintendent as recommended, would bring about hureancracy: such duties are impossible for him personally to perform and should not be delegated to a clerical force
Recommendation that authority of city superintendent should be increased is inconsistent with criticism of "machinery," "military methods," etc
Detailed reports of associate superintendents show that as division superintendents they give close attention to instraction and to all matters merely referred to in general reports
District superintendents have participated in making course of study, recommending text books, organization of classes, selection, promotion and approval of teachers, and have been called into conferences with board of superintendents at nearly all the meetings
Information about cooperation with district superintendents, principals and teachers could have been easily obtained by Prof. Elliott and Prof. Hanus
Principals have been left free to try various systems of teaching, part time, grading; to adapt curriculum to needs of special children; to develop social side; to place teachers, select text books from ample list, etc
Investigator did not tell which recommendations had not received attention, or verify by minutes or questions the statements of teachers
Best features of proposed "supervisory council" have been in operation for 11 years
Extravagant misstatement that "investigation that is needed is not carried on at all"; bureau of appraisal and investigation could not act without friction; better to have branch investigators associated with board of superintendents
No discrimination now against outsiders; about one-sixth of elementary teachers, and over one-half of all high school teachers have been credited with outside experience
Age of principals due to refusal to merge eligible lists or reduce required classroom experience
No system of examination can letermine qualifications for an officer of the grade of district superintendent or director
Nint fair to criticize the board of superintendents for clerical work which it did not require

## ADDENDA

A digest of the Goodnow-Howe report, released October 15, 1913, is added to our digest published on July 17, 1913
Throughout this pamphlet we have used or referred to concrete illustrations whenever these were furnished in the original reports
At the present time we have not called attention to the omission of concrete illustration but have omitted all criticism whatsocver of the reports, their findings, supporting data and recommendations, acting solely as reporters to the public on the statements of the school inquiry investigators
We are strong believers in putting out the most complete array of supporting statements possible, whenever a finding, criticism or commendation is alleged
At a later date we purpose to present the relative disadvantage of reporting to the public statements that do not illustrate exactly what conditions are, precisely what the investigator has in mind, and that do not show whether the denominator of a condition reported is one unit, a few units or the entire system

## WHAT THE GOODNOW-HOWE REPORT COVERS

History of the development of the city school charter from the Act of 1851 to its present form
Interpretation of the present charter defining relations between the board of education and the City of New York, the board of estimate and apportionment and the department of finance
Controversies, compromises and present procedures between the school board and these bodies
Analysis of school board estimates and resulting apportionments by the city authorities
How the school board is organized; its powers, duties and policies; special account of internal committee organization
How the board conducts its meetings
How the various bureaus and offices of the department of education are organized
Detailed account of the actual procedure of each bureau such as of audit, supplies, care of buildings and school administration
Critical comment with recommendations on findings relating to organization and procedure of the entirc school board and of offices and bureaus of the educational department

[^0]
## WHAT THE GOODNOW-HOWE REPORT PRAISED

As to Board of Education
Observes special school fund segregation made by board of estimate
Attendance of members at meetings is fairly regular; 325 absences of 1553 possible attendance or $21 \%$ at 34 meetings in 1911

## As to Bureau of Audit

Accounting practices of bureau of audit insofar as they extend, are commendable
Procedure is simple and effective
Divisional organization and use of modern statistical machinery are worthy of special comment
Auditor evinces a high order of ability

## As to Bureau of Supplies

Supplies bureau observes a well-regulated and orderly procedure
General purchasing policy is commendable
The superintendent has been conscientious and indefatigable in his work

As to Bureau of Buildings
Procedure gives evidence of a high degree of efficiency
Internal organization is that of a well planned administrative unit
By much thought and care, the superintendent has attained various desirable results
All employees are instructed and governed by carefully formulated rules, regulations and organization charts
Reports to keep the superintendent currently advised as to progress of work are called for
Building plans and details have been standardized to a considerable extent
Thoroughness in preparation of plans for construction contracts is to be commended

## As to Board Meeting Minutes

Index of minutes of board meetings is prepared in elaborate and excellent form

## EXTENT AND CONTROL OF EXPENDITURES

Experse of conducting the schools has been increasing out of all proportion to the number of those receiving instruction, after taking into account new activities and teachers' salary increases. A 40\% increase in attendance wit. $128 \%$ increase in school property and $68 \%$ increase in current expenses
The present control of the board of estimate cannot be charged with causing the interests of the schools to suffer

## CONDITIONS SAID TO NEED CORRECTION

## Attitude of Board of Education Toward Board of Estimate and Apportionment Hampers City Government

Exact relation of board of estimate and board of education has not been understood; no agreement has been reached; insistence of or upon opposed views has prevented cooperation.
Charter provisions regulating expenditure of funds are ambiguous and in some cases not consistent; sections 262 , 1064 and 56 , secure to the educational administration an independence of municipal control not accorded ordinary departments; other provisions in section 1064 place the department of education in the position of an ordinary city department
Court of appeals considers that the state policy has treated the board of education as a corporation separate from the city
Past legal decisions do not furnish proof that the board of education is relieved from the ordinary financial control which the board of estimate exercises over other city departments
Board of education alone among city departments has refused to conform to uniform accounting procedure
Board has failed to observe many of the important regulations, refused to furnish schedules and documents and information exacted from other departments:

1 copies of open market orders
2 schedules of open market orders issued
3 copies of invoices
4 monthly reports of contracts, orders, invoices and vouchers
5 schedules of vouchers
6 monthly statements on
general ledger
appropriation accounts
corporate stock bonds etc contracts
The comptroller has not made his requests sufficiently comprehensive, definite or categorical to subserve the purposes either of estimates or of the general city accounting system; he has made little or no attempt to secure a correlation of school board accounts with school board budget estimates
Board of education is disregarding the law, unnecessarily hampering the operations of city government
School board accounts have not been kept so as currently to develop the information desired by comptroller; the board has not had this information or a way to get it

Divided responsibility for selection of sites and details of buildings between board of education and board of estimate is objectionable
Confusion and conflict due to charter inconsistencies have been increased because neither the board of estimate nor the comptroller has disciplinary means of enforcing obligations recognized by law [sec 226 charter]

## Teachers' Salary Accruals Have Been Annually Misstated by at Least \$250,000

[Method explained to investigating committee by the auditor; report notes that accrual records have since been installed]
Record of withdrawals during a given year does not include those between May 31 and December 31 of the previous year, though provided for in the estimate for the next year
Record of new teachers does not segregate appointees for replacement from those for extension
does not include new teachers in replacement of withdrawals during the last seven months of the preceding year, if appointed in that year
No consideration is given to the amount of time involved in the unearned salary item of a withdrawal
School board's estimate of 1912 accruals was $\$ 150,000$; actual 1912 accruals were closely approximated to be over $\$ 400,000$

Organization of Board of Education Has Made It a Failure
The size, internal organization of 14 separate standing committees and legal limitations of the board are responsible for most of the undesirable conditions covered in this report
Political machinery provided by law is primarily responsible for the failures in the administration of the largest annual budget item; the care of $\$ 135,000,000$ worth of property; the education of 700,000 children
It has failed to rise to its obligations as a legislative and policy making body
It has failed utterly in the only field where it was expected to function
Bylaws and practices adopted have imposed upon the board duties intended by the charter to be performed by the executive committee and in addition an enormous mass of routine never intended by the charter to be performed either by the board or its executive committee
The exercise of the administrative functions by the board as a whole is as repugnant to all principles of economy and expedition as it is inconsistent with the intent of the charter
It has abdicated to departmental experts the important functions of molding the school policy

It has failed to delegate power to do petty routine work to paid office heads, thougli enabled to do so by law
It has added enormously detailed functions of a purely routine character
$85 \%$ of all action taken in 1911 should not require action of board but merely of administrative officers [example a]; $9 \%$ should be delegated to executive committee [b] ; only $6 \%$ should have been properly exercised by the board [c]
a-approving bills, awarding contracts, loaning furniture; appointing, promoting, retiring and transferring teachers; excusing absences; granting permission to use school buildings etc
b-approving plans, leasing premises, selecting sites, disciplining etc
c-amending bylaws, establishing trade schools, adopting estimates, requesting corporate stock issues etc
Work and methods are $75 \%$ routine, petty, rubber-stamp and detailed rather than policy making and legislative
Members are not familiar with the whole school problem, nor have they the means to that end
Board fails to awaken a proper sense of responsibility among members
It is difficult if not impossible to locate responsibility, so widely is authority distributed among board, committees and bureau heads
Men sincerely desirous of public service are deterred from accepting membership because of lack of opportunity for efficient work
Board is not directly responsive to public or to city officials responsible to the public for the schools
It is limited in power to shape its internal organization
Investigation of individuals can be made only by formal resolution of board of education; this gives those to be investigated advance notice
Board has not at its ready command necessary professional and expert service for investigation
Control of board of education over board of superintendents is weak and unsatisfactory
Board's power to determine kinds of teachers' licenses is limited

## Board Meetings Are Merely Mechanical and Perfunctory

Treatment of matters in calendar is too brief to give board members adequate idea of what they are to vote on
Reading of reports by secretary is not adequate to proper understanding of subject matter
Printed reports are seldom prepared for members and when prepared, there is unnecessary delay

Board not infrequently adopts resolutions of prime importance without having before it in writing the language of the resolution or other document pertinent to it
Printed minutes are never in secretary's hands before more than 3 weeks after a meeting; members never have minutes of preceding meeting; 130 printer's composing is done till after meeting
Board's action purely a perfunctory ratification of committee reports
343 of 348 resolutions presented at six consecutive meetings adopted unanimously without discussion; another count shows 192 of 194 at five consecutive meetings
Board rotes on 10 to 30 resolutions as one
On other occasions the board discussed only 16 out of 203 measures acted on, and was divided only on 4
Proceedings a mechanical dialog between the secretary and president, while disinterested members engage in conversation or retire to committce rooms
A number of strong individuals mold the board at a maximum of effort and a minimum of efficiency
Meetings seldom begin on time

## School Board Committee Organization is Cumbrous and Inefficient

Executive committee has failed utterly to assume the functions expected of it by the legislature and has become a mere interim committee for the summer months
Conflict between committees has resulted in creating miniature boards of education within the official board
There is great waste of energy, ability and money for clerks, printing etc; direct and ready action is encumbered
Able men can make their influence felt only by circumlocution
Deference to committee recommendations traditional and prevents inquiry or challenge
Committee reports in many cases fail to present the wording of bills treated
A non-official organization of teachers gives a bill more careful consideration than the board
Reports on disciplining teachers give verdict without discussing evidence
Reports on rejection of teachers' nominations do not state reasons
Committees, assuming approval of board, complete important matters before submitting them to board for approval

## Committee on Finance Lacks Data for Estimates

Efficiency of activities for which requests were made is not shown; the only available source of data is the city superintendent's report, the tardy publication of which limits the board to 1910-1911 statements as a basis for 1913 appropriations
Requests for corporate stock are made without information
Only 4 of 20 requests for special revenue bonds in 1910-1911 explain the purpose for which bonds were wanted
Transfers from funds are requested without presentation of supporting data
Estimates for enlarging a single department are not collated but are scattered under 2,3 or 4 heads
Estimates do not distinguish enlargement from innovation
Estimates are passed in a perfunctory manner without investigation of superintendents' estimates

Changing Decisions of Committee on Sites Suggests Insufficient Reasons for Requests
In 3 years no request for a site has contained such data as the rate of increase of population
Reports rescinding sites frequently not supported with data
Recommended in May 1910 the recission of 22 site selections of which nine had been made within 6 months by the very same committee
Took no part in preparation of 1912-13 estimate, merely drawing up a list of buildings called for by the building committee and not yet provided with sites
Decided not to exercise discretion in making this budget but neglected to refer 44 communications re buildings to other authority
Added a site merely on a member's motion without reference to board of superintendents for need and with no letters before the committee re need for site
Sites acquired but not used have involved a loss through taxes of $\$ 660,000$ or more

## Estimates of Committee on Buildings not Supported by Census Board Claims

11 building requests constituting $25 \%$ of all elementary school buildings asked for in 1912-13 by building committee were declared undesirable by permanent census board. Of these 5 were not necessary; 2 of doubtful necessity; 2 larger than necessary; and 2 not properly located
Census board not invited by committee on buildings to cooperate until after latter's estimate had been printed

Order of priority of buildings requested and sent to board of estimate not regarded as final and materially changed
Committee is without administrative power or assistance and must accept the services of the bureau of supervisors of janitors over whose work it has no control
Work performed in awarding contracts is purely perfunctory
Authorization of repairs is a palpable absurdity and a waste of time and money in that the committee knows nothing of conditions and must accept the word of the superintendent

## Bureau of Buildings Has Only Partial Control Over Matters for Which It Is Responsible

Superintendent of buildings is charged with the repair of heating and ventilating apparatus, with no control over its operation, or over choice and purchase of fuel and other operative supplies
Estimates for draftsmen and inspectors are based on no applied percentage to construction cost
The adjustment of the bureau force to fluctuating building demands is accomplished with difficulty
Present leasing procedure involving outside review and approval by sinking fund commissioners is unnecessarily timeconsuming
Method of purchasing furniture by entering into contract for each school and by grouping different kinds of articles together in one contract item prevents the department from taking full advantage of
(a) direct purchase from special dealers
(b) purchasing in largest possible quantity

Field survey notes for repair estimates are inadequate for any intelligent outside review as to the necessity for repairs enumerated

## Accounts of Bureau of School Supplies Inadequate, Tardy and at Variance with Other Reports

Ascounts are kept on single entry system, which is inadequate in that it permits of errors which cannot readily be located; no attempt is made to effect any control over stock purchased through any stock accounts
Accounts maintained neither with reference to nor in harmony with general board of education accounts
Financial reports are not accurate
Frrors are admitted in practically all accounts
Bureau has no accounting officer responsible for all accounts
Bureau has not supplied comptroller with salient facts

1912 accounts not compiled until May 1913; this is earlier than customary
No supporting data for estimates show stock on hand in schools or depositories at the close of the school or fiscal year
Published transactions of the supplies bureau show actual transactions only in part; general supplies expenditures amounting to $\$ 180,094$ were not enumerated [year not stated]; expenditures for fuel aggregating over $\$ 500,000$ annually are not shown
Transactions under general supplies fund as reported by the superintendent of supplies are at variance with facts presented to the mayor in school board reports to the extent of $\$ 31,422$ in 1906 to 1910 inclusive
The inspection system in operation at depositories is weak in that stupplies packed to be delivered are inspected by those responsible for specific supplies packed
The issuing of purchase orders by boroughs now required under statutory provision entails unnecessary clerical work in that five orders are currently issued where one would suffice

## Committee on Supplies Works Unnecessarily Outside Its Proper Sphere

Has interfered in an unwarranted manner with the auditor in the exercise of his rights
[See under auditor]
Performs many functions which the superintendent of supplies ought to be competent to perform, such as approving officers' bills, granting routine requests for pictures, maps, and board minutes

## Committee on Care of Buildings Needlessly Engaged in Detail Work

Supervises the operative force, but another committee [on supplies] chooses and purchases fuel, and still another [committee on buildings] is charged with installation and repair of operative plant
Busies itself with petty details such as trivial complaints against janitors on which their supervisor should act; minutes shows requests as to which door a principal should keep open, slight changes in office space, pupil keeping a motorcycle in building, use of buildings for meetings

## Committees Interfere with Work of Bureau Chiefs

Character of business in bureau of audit requires very little committee supervision

Committees lack impartial investigators having for investigations only bureau supervisors, often under investigation
Committees interfere with burean chiefs in salary and disciplinary matters affecting employees by reason of the fact that these matters must come up for committee consideration
Committee on bylaws does not hold public hearings

## Formality, Delay and Duplicated Work Characterize the Office of Overpaid School Board Secretary

Indexing of minutes of school board and committees is greatly in arrears
The secretary has paid little attention to improving such conditions
Formality, as against expediency, is the characteristic procedure of the office
The secretary has accentuated these adyerse conditions by assuming secretarial duty to all committees
Neither the secretary, his assistant nor chief clerk seems to exercise much supervision over the work of committee clerks
The clerk of committee on care of buildings performs administrative work without reference to the executive officer of that committee
Unnecessary formality, duplication of work, delay and expense is entailed in the procedure of this office
A central library of reports and publications both local and country-wide is lacking
With respect to his prescribed duties and work assumed, the salary of the secretary is excessive

## Methods Employed by Bureau of Audit and Accounting Detract from Accuracy and Value of Reports

Auditor maintains no control over supplies bureau accounts reflecting transactions of approximately $\$ 2,000,000$ annually
Auditor should have asserted his authority more positively to remedy this serious condition
Failure of auditor to effect an independent audit of supplies bureau accounts has produced undesirable conditions
Information as to salary accruals has not been properly developerl; both data and method of estimating salary accruals are inaccurate and fundamentally misleading
Department has refused to observe comptroller's requests for month!y trial balances and other statements
From any point of view, statistics as to expenditures for supplies and fuel are of little value

Trial balances of ledgers and subsidiary records are not taken off monthly, but as work requirements make possible or as occasion demands
Balances of funds on hand at end of year are shown without any information as to encumbrances against same

## Ineffectual Board of Superintendents Hampers Educational Endeavor

Is an ineffective administrative body which has outlived its usefulness
It unnecessarily complicates administrative procedure
Because of its form as a board it consumes time on tasks which could be done more easily and quickly by the city superintendent
Board seriously limits the shaping of educational endeavor by the board of education
Board has based recommendations for sites on uncertainties; in the 1912-13 estimate, $S$ high schools were requested; one month later only the 8th on the list was wanted
City Superintendent Has Not Used Available Information
Office force is inadequate
Has not made proper use of information currently developed and available
His recommendations for corporate stock requests have not been reliable
A large amount of time is consumed in furnishing clerical information relating to vacancies, licenses and qualifications
Much of his time is unnecessarily consumed in administrative work with board members and committees
Submitted 1913 corporate stock estimate to building committee without supporting data; when asked for data he furnished figures so inadequate that buildings committee was obliged to make a separate survey of the situation
Inserted two important building items the necessity for which had escaped the original list

## City Superintendent's Office Methods Faulty

Data on teachers' personal record cards and book records duplicated
Book records little used and not kept up to date
Efficient administration calls for statistics far more reaching in their scope than those now collected and collated
Handling unimportant inquiries involves reference from one office to another

## Local School Boards Are Ignored

There is little opportunity for local boards or parents' associations to participate in framing policies or in control of curriculm

## RECOMMENDATIONS CLEARLY REQUIRING ADDITIONAL MONEY

## As to Business Administration

Establish the office of business manager to control the work now done by the auditor, superintendents of buildings and supplies and the supervisor of janitors

## As to City Superintendent's Office

Extend statistical work to show currently conditions and results in activities throughout the system;
Employ an experienced statistician to collate and interpret educational statistics; install modern statistical machinery and methods as are employed in the bureau of audit; employ two additional clerks
Furnish additional technical assistance to enable the superintendent to effect thorough and scientific study before submitting building recommendations
Transfer work of furnishing information on vacancies, licenses, qualifications, etc, to the central information division urged in comection with the secretary's office

## As to Audit Bureau

Add a small inspection force including one inspector trained to investigate construction and repair claims, and one or two other competent men to supplement the inspection effected outside the anditor's jurisdiction; as field auditors these men could check up teachers' attendance
If present organization at education headquarters is not adequate to secure data for comptroller, provide for adequate organization in the budget

## As to Supplies Bureau

Secure a central supply depository with adequate accommodations; from evidence submitted in superintendent's memorandum and from conditions observed the need for a depository is imperative; this involves capital investment intended to effect economy in current expenses
Provide executive assistance to superintendent of supplies

## As to Care of Buildings

Increase executive force and double inspectorial force of office of supervisor of janitors; two additional clerks required for office routine under proposed innovations

## As to Bureau of Investigation and Appraisal

Establish a central reference and information bureau as a unit in the school board secretary's office
Should pass upon the results of administration and supervision
Should conduct experimental and informative investigations for the intelligent development of the school system
Borrow and apply to New York such experience of other cities as would be advantageous
Report findings first to the city superintendent for review and thereafter to the school board

## RECOMMENDATIONS NEITHER DIRECTLY ADD. ING NOR SAVING MONEY, BUT INTENDED TO INCREASE EFFICIENCY

## As to Estimates

Place the making of recommendations for new buildings and sites on a scientific basis, utilizing the work of the permanent census bureau to the utmost

## As to Auditing Bureau

Set up controlling accounts over stock accounts of supplies bureau
Devisc a scientific method of ascertaining salary accruals
Extend general fund accounting information to correlate actual with estimated expenditures for a given period
Establish controlling accounts and furnish schedules and other data in agreement with comptroller's requests

## As to Supplies Bureau

Revise the present inadequate accounting methods along the line of a complete double entry accounting system to be controlled by the auditor and providing for a daily control of stock, location of responsibility, and the compilation of definite data in respect to supply purchase and consumption and the appraisal of the system of purchase inspection
Formulate and adopt a uniform method of presenting estimates meeting the requirement of the board of estimate
Inaugurate an independent inspection of supplies issued
Conduct efficiency studies on purchase of supplies

## As to Building Bureau

Relieve bureau of its engineering functions and establish a bureau of engineering
Institute a percentage method of estimating cost of draftsmen and inspectors
Publish percentage records of operations and bureau cost as a means for review as to work and efficiency
Provide a lump sum contingent fund for temporary draftsmen and inspectors to avoid outside formal procedure to secure emergency help
Establish a system of time and cost records to determine adequacy of inspection work

## As to Secretary's Office

Print minutes in time for adoption of next meeting
Use titles in minutes to facilitate reference
Publish minutes semi-anually, promptly at termination of such period
Transfer secretarial work of committees from the secretary's office to the bureaus and offices supervised by committees
Transfer the several committee clerks, now in the secretary's office to the various administrative units to which their work relates

## As to Budget Estimates

It may be expedient to give the board of education power to purchase sites without the comptroller's consent, despite the board's record
Accounts of general fund expenditures should be extended to show
a-All expenditures classified under budgetory estimate item numbers
b-All expenditures in terms of "teaching service rendered" in addition to cost thereof, such teaching service representing number of teachers pro rata, to actual day's' service rendered
It would not be safe to decentralize the financial control of the schools
It is necessary that demands for educational expansion be weighed by some independent body
Growing demand for wider use of schools for civic and recreational purposes makes advisable the concentration of financial control and responsibility in the board of estimate
Board of estimate should segregate school budget only to determine large questions of policy

## As to School Board Accounts

Board of education accounts should be made to conform to those of other city departments
Board of education claims not in form for finance department certification should not be passed

## As to Executive Committee

Under present organization the executive committee should resume the functions contemplated by the charter

## RECOMMENDATIONS INTENDED TO SAVE MONEY

Exempt contractors from building delays only for legal cause
Department should exercise its right in executing leases so as to avoid delays
Adopt open contract basis for purchase of furniture and equipment
Elaborate field survey notes for repair estimates and make them a matter of permanent record
Maintain under the supervision of janitors fuel heat and service records

## As to Board of Education

Create an internal committee in board of education on economy and efficiency to review methods, materials and usage thereof
Avoid formal correspondence with interdepartmental bureaus and offices where reference would suffice

## RECOMMENDATIONS REQUIRING STATE LEGISLATION

## As to Duties of Board of Education

Amend charter so as to relieve both board and executive committee from administrative work

## As to Size of Board

Amend charter by providing that the board of education shall consist of $S$ members, three appointed by the mayor for the city at large with three votes each; five appointed by respective borough presidents, the Manhattan and Brooklyn members to have two votes, the others one vote
One-fourth of the membership of board to retire each year

## As to Board of Superintendents

Abolish the board of superintendents by charter amendment and make its members assistants to the city superintendent

## As to Supply Bureau

Amend charter to allow purchasing of supplies for entire city instead of by boroughs

## As to Administrative Agents

Existing bylaws regarding administrative agents should be repealed, and plenary power to administer schools lodged in the school board as now accorded the board of estimate to administer city affairs
A short, simple school charter should endow the board of education with practically all authority over administration and policy, subject to financial control of the board of estimate

## As to Local School Boards

Board of education should develop local school boards by devolution of some of its authority to local administrative agencies
The form of local school boards should not be provided by state laws, but left to the board of education

## As to Supervisors and Teachers

Powers of teachers, principals, district superintendents, should be determined by the bylaws of the board of education [not by state laws] to awaken talent now dormant

## As to Budget Segregation

If board of education furnishes comptroller with data as desired, financial authorities should not continue detailed budget segregation

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[^0]:    Judgment base: Interpretation of city charter
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